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JOURNAL OF PROCEEDINGS AND ADDRESSES

OF THE

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

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NATIONAL EDUCATION ASSOCIATION
OF THE UNITED STATES

Journal

OF

Proceedings and Addresses

OF THE

FIFTY-FIRST ANNUAL MEETING

HELD AT

SALT LAKE CITY, UTAH

JULY 5–11

1913

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NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

1857–1870

THE NATIONAL TEACHERS ASSOCIATION

Organized August 26, 1857, at Philadelphia, Pennsylvania.

PURPOSE—*To elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States.*

The name of the association was changed at Cleveland, Ohio, on August 15, 1870, to the "National Educational Association."

1870–1907

NATIONAL EDUCATIONAL ASSOCIATION

Incorporated under the laws of the District of Columbia, February 24, 1886, under the name, "National Education Association," which was changed to "National Educational Association," by certificate filed November 6, 1886.

1907–

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

Incorporated under a special act of Congress, approved June 30, 1906, to succeed the "National Educational Association." The charter was accepted and by-laws were adopted at the Fiftieth Anniversary Convention held July 10, 1907, at Los Angeles, California.

ACT OF INCORPORATION

AN ACT TO INCORPORATE THE NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled:

SECTION 1. That the following named persons, who are now officers and directors and trustees of the National Educational Association, a corporation organized in the year eighteen hundred and eighty-six, under the Act of General Incorporation of the Revised Statutes of the District of Columbia, viz.: Nathan C. Schaeffer, *Eliphalet Oram Lyte, John W. Lansinger, of Pennsylvania; Isaac W. Hill, of Alabama; Arthur J. Matthews, of Arizona; John H. Hinemon, George B. Cook, of Arkansas; Joseph O'Connor, Josiah L. Pickard, Arthur H. Chamberlain, of California; Aaron Gove, *Ezekiel H. Cook, Lewis C. Greenlee, of Colorado; Charles H. Keyes, of Connecticut; George W. Twitmyer, of Delaware; *J. Ormond Wilson, *William T. Harris, Alexander T. Stuart, of the District

* Deceased.

of Columbia; Clem Hampton, of Florida; William M. Slaton, of Georgia; Frances Mann, of Idaho; J. Stanley Brown, *Albert G. Lane, Charles I. Parker, John W. Cook, Joshua Pike, Albert R. Taylor, Joseph A. Mercer, of Illinois; Nebraska Cropsey, Thomas A. Mott, of Indiana; John D. Benedict, of Indian Territory; John F. Riggs, Ashley V. Storm, of Iowa; John W. Spindler, Jasper N. Wilkinson, A. V. Jewett, Luther D. Whittemore, of Kansas; William Henry Bartholomew, of Kentucky; Warren Easton, of Louisiana; *John S. Locke, of Maine; M. Bates Stephens, of Maryland; Charles W. Eliot, *Mary H. Hunt, Henry T. Bailey, of Massachusetts; Hugh A. Graham, Charles G. White, William H. Elson, of Michigan; *William F. Phelps, Irwin Shepard, John A. Cranston, of Minnesota; Robert B. Fulton, of Mississippi; *F. Louis Soldan, James M. Greenwood, William J. Hawkins, of Missouri; Oscar J. Craig, of Montana; George L. Towne, of Nebraska; Joseph E. Stubbs, of Nevada; James E. Klock, of New Hampshire; James M. Green, John Enright, of New Jersey; Charles M. Light, of New Mexico; *James H. Canfield, Nicholas Murray Butler, William H. Maxwell, Charles R. Skinner, *Albert P. Marble, James C. Byrnes, of New York; James Y. Joyner, Julius Isaac Foust, of North Carolina; Pitt Gordon Knowlton, of North Dakota; Oscar T. Corson, Jacob A. Shawan, Wells L. Griswold, of Ohio; Edgar S. Vaught, Andrew R. Hickham, of Oklahoma; Charles Carroll Stratton, Edwin D. Ressler, of Oregon; Thomas W. Bicknell, Walter Ballou Jacobs, of Rhode Island; David B. Johnson, Robert P. Pell, of South Carolina; Moritz Adelbert Lange, of South Dakota; Eugene F. Turner, of Tennessee; Lloyd E. Wolfe, of Texas; David H. Christensen, of Utah; Henry O. Wheeler, Isaac Thomas, of Vermont; Joseph L. Jarman, of Virginia; Edward T. Mathes, of Washington; T. Marcellus Marshall, Lucy Robinson, of West Virginia; Lorenzo D. Harvey, of Wisconsin; Thomas T. Tynan, of Wyoming; Cassia Patton, of Alaska; Frank H. Ball, of Porto Rico; Arthur F. Griffiths, of Hawaii; C. H. Maxson, of the Philippine Islands, and such other persons as now are or may hereafter be associated with them as officers or members of said Association, are hereby incorporated and declared to be a body corporate of the District of Columbia by the name of the "National Education Association of the United States," and by that name shall be known and have perpetual succession with the powers, limitations, and restrictions herein contained.

SEC. 2. That the purpose and object of the said corporation shall be to elevate the character and advance the interests of the profession of teaching, and to promote the cause of education in the United States. This corporation shall include the National Council of Education and the following departments, and such others as may hereafter be created by organization or consolidation, to wit: the Departments, first, of Superintendence; second, of Normal Schools; third, of Elementary Education; fourth, of Higher Education; fifth, of Manual Training; sixth, of Art Education; seventh, of Kindergarten Education; eighth, of Music Education; ninth, of Secondary Education; tenth, of Business Education; eleventh, of Child Study; twelfth, of Physical Education; thirteenth, of Natural Science Instruction; fourteenth, of School Administration; fifteenth, the Library Department; sixteenth, of Special Education; seventeenth, of Indian Education; the powers and duties and the number and names of these departments and of the National Council of Education may be changed or abolished at the pleasure of the corporation, as provided in its by-laws.

SEC. 3. That the said corporation shall further have power to have and to use a common seal, and to alter and change the same at its pleasure; to sue or to be sued in any court of the United States, or other court of competent jurisdiction; to make by-laws not inconsistent with the provisions of this act or of the Constitution of the United States; to take or receive, whether by gift, grant, devise, bequest, or purchase, any real or personal estate, and to hold, grant, convey, hire, or lease the same for the purposes of its incorporation; and to accept and administer any trust of real or personal estate for any educational purpose within the objects of the corporation.

* Deceased.

SEC. 4. That all real property of the corporation within the District of Columbia, which shall be used by the corporation for the educational or other purposes of the corporation as aforesaid, other than the purposes of producing income, and all personal property and funds of the corporation held, used, or invested for educational purposes aforesaid, or to produce income to be used for such purposes, shall be exempt from taxation; *provided*, however, That this exemption shall not apply to any property of the corporation which shall not be used for, or the income of which shall not be applied to, the educational purposes of the corporation; and, *provided further*, That the corporation shall annually file, with the Commissioner of Education of the United States, a report in writing, stating in detail the property, real and personal, held by the corporation, and the expenditure or other use or disposition of the same, or the income thereof, during the preceding year.

SEC. 5. That the membership of the said corporation shall consist of three classes of members—viz., active, associate, and corresponding—whose qualifications, terms of membership, rights, and obligations shall be prescribed by the by-laws of the corporation.

SEC. 6. That the officers of the said corporation shall be a President, twelve Vice-Presidents, a Secretary, a Treasurer, a Board of Directors, an Executive Committee, and a Board of Trustees.

The Board of Directors shall consist of the President, the First Vice-President, the Secretary, the Treasurer, the chairman of the Board of Trustees, and one additional member from each state, territory, or district, to be elected by the active members for the term of one year, or until their successors are chosen, and of all life directors of the National Educational Association. The United States Commissioner of Education, and all former Presidents of the said Association now living, and all future Presidents of the Association hereby incorporated, at the close of their respective terms of office, shall be members of the Board of Directors for life. The Board of Directors shall have power to fill all vacancies in their own body; shall have in charge the general interests of the corporation, excepting those herein intrusted to the Board of Trustees; and shall possess such other powers as shall be conferred upon them by the by-laws of the corporation.

The Executive Committee shall consist of five members, as follows: the President of the Association, the First Vice-President, the Treasurer, the Chairman of the Board of Trustees, and a member of the Association, to be chosen annually by the Board of Directors, to serve one year. The said committee shall have authority to represent, and to act for, the Board of Directors in the intervals between the meetings of that body, to the extent of carrying out the legislation adopted by the Board of Directors under general directions as may be given by said board.

The Board of Trustees shall consist of four members, elected by the Board of Directors for the term of four years, and the President of the Association, who shall be a member *ex officio*, during his term of office. At the first meeting of the Board of Directors, held during the annual meeting of the Association at which they were elected, they shall elect one trustee for the term of four years. All vacancies occurring in said Board of Trustees, whether by resignation or otherwise, shall be filled by the Board of Directors for the unexpired term; and the absence of a trustee from two successive annual meetings of the board shall forfeit his membership.

SEC. 7. That the invested fund now known as the "Permanent Fund of the National Educational Association," when transferred to the corporation hereby created, shall be held by such corporation as a Permanent Fund and shall be in charge of the Board of Trustees, who shall provide for the safekeeping and investment of such fund, and of all other funds which the corporation may receive by donation, bequest, or devise. No part of the principal of such Permanent Fund or its accretions shall be expended, except by a two-thirds vote of the active members of the Association present at any annual meeting, upon the recommendation of the Board of Trustees, after such recommendation has been approved by vote of the Board of Directors, and after printed notice of the proposed

expenditure has been mailed to all active members of the Association. The income of the Permanent Fund shall be used only to meet the cost of maintaining the organization of the Association and of publishing its annual volume of *Proceedings*, unless the terms of the donation, bequest, or devise shall otherwise specify, or the Board of Directors shall otherwise order. It shall also be the duty of the Board of Trustees to issue orders on the Treasurer for the payment of all bills approved by the Board of Directors, or by the President and Secretary of the Association acting under the authority of the Board of Directors. When practicable, the Board of Trustees shall invest, as part of the Permanent Fund, all surplus funds exceeding five hundred dollars that shall remain in the hands of the Treasurer after paying the expenses of the Association for the previous year, and providing for the fixed expenses and for all appropriations made by the Board of Directors for the ensuing year.

The Board of Trustees shall elect the Secretary of the Association, who shall also be secretary of the Executive Committee, and shall fix the compensation and the term of his office for a period not to exceed four years.

SEC. 8. That the principal office of the said corporation shall be in the city of Washington, District of Columbia; *provided*, That the meetings of the corporation, its officers, committees, and departments, may be held, and that its business may be transacted, and an office or offices may be maintained, elsewhere, within the United States, as may be determined, by the Board of Directors, or otherwise in accordance with the by-laws.

SEC. 9. That the charter, constitution, and by-laws of the National Educational Association shall continue in full force and effect until the charter granted by this act shall be accepted by such Association at the next annual meeting of the Association, and until new by-laws shall be adopted; and that the present officers, directors, and trustees of said Association shall continue to hold office and perform their respective duties as such until the expiration of terms for which they were severally elected or appointed, and until their successors are elected. That at such annual meeting the active members of the National Educational Association, then present, may organize and proceed to accept the charter granted by this act and adopt by-laws, to elect officers to succeed those whose terms have expired or are about to expire, and generally to organize the "National Education Association of the United States"; and that the Board of Trustees of the corporation hereby incorporated shall thereupon, if the charter granted by this act be accepted, receive, take over, and enter into possession, custody, and management of all property, real and personal, of the corporation heretofore known as the National Educational Association, incorporated as aforesaid, under the Revised Statutes of the District of Columbia and all its rights, contracts, claims, and property of every kind and nature whatsoever, and the several officers, directors, and trustees of such last-named Association, or any other person having charge of any of the securities, funds, books, or property thereof, real or personal, shall on demand deliver the same to the proper officers, directors, or trustees of the corporation hereby created. *Provided*, That a verified certificate executed by the presiding officer and secretary of such annual meeting, showing the acceptance of the charter granted by this act by the National Educational Association shall be legal evidence of the fact, when filed with the Recorder of Deeds of the District of Columbia; and, *provided further*, That in the event of the failure of the Association to accept the charter granted by this act at said annual meeting then the charter of the National Educational Association and its corporate existence shall be, and are hereby extended until the thirty-first day of July, nineteen hundred and eight, and at any time before said date its charter may be extended in the manner and form provided by the general corporation law of the District of Columbia.

SEC. 10. That the rights of creditors of the said existing corporation, known as the National Educational Association, shall not in any manner be impaired by the passage of this act, or the transfer of the property heretofore mentioned, nor shall any liability or obligation, or the payment of any sum due or to become due, or any claim or demand,

in any manner, or for any cause existing against the said existing corporation, be released or impaired; and the corporation hereby incorporated is declared to succeed to the obligations and liabilities, and to be held liable to pay and discharge all of the debts, liabilities, and contracts of the said corporation so existing, to the same effect as if such new corporation had itself incurred the obligation or liability to pay such debt or damages, and no action or proceeding before any court or tribunal shall be deemed to have abated or been discontinued by reason of this act.

SEC. 11. That Congress may from time to time alter, repeal, or modify this act of incorporation, but no contract or individual right made or acquired shall thereby be divested or impaired.

Approved June 30, 1906.

Accepted and adopted as the constitution of the National Education Association of the United States by the active members of the National Educational Association in annual session at Los Angeles, Cal., July 10, 1907.

BY-LAWS

(Amended at meeting of active members held in Chicago, Ill., July 10, 1912)

ARTICLE I—MEMBERSHIP

SECTION 1. Teachers, others actively engaged in educational work, and educational institutions as defined in Section 2, may become active members of the National Education Association of the United States upon the payment of an enrollment fee of two dollars and the annual dues for the current year.

SEC. 2. Educational institutions shall include schools, school boards, library boards, educational publishers, and such clubs and similar organizations as are distinctly educational or have educational departments properly organized with a definite membership.

SEC. 3. Educational institutions as defined in Section 2 may be enrolled as active members and represented by any person regularly connected with or a member of the institution, and such representative may exercise all the rights and enjoy all the privileges of active membership, including the right to vote at business meetings; *provided*, That such representative presents a certificate showing that the person named therein has been regularly elected as such representative of the faculty or membership of such institution; but no person shall under any circumstances have the right to cast more than one vote.

SEC. 4. The annual dues of active members are two dollars, which shall be paid at the time of the annual meeting of the Association, or shall be sent to the Secretary before November 1 of each year. An active member may discontinue his membership by giving written notice to the Secretary before November 1. An active member forfeits his membership by being two years in arrears. Those who have forfeited or discontinued their membership may exercise the option of renewing the same by paying all arrears and getting the published *Proceedings* of the intervening years, or of becoming members on the same terms as new members. Active members shall be entitled to the published *Proceedings* without coupon or other conditions.

SEC. 5. All life members and life directors shall be denominated active members, and shall have all the rights and privileges of such members without the payment of the annual dues.

SEC. 6. The right to vote and to hold office in the Association, the Council, or the departments is open to all active members whose dues are paid.

SEC. 7. Any person may become an associate member for one year by paying a membership fee of two dollars.

SEC. 8. Eminent educators not residing in America may be elected, by the Board of Directors, corresponding members. The number of corresponding members shall at no time exceed fifty. They shall not pay any dues.

SEC. 9. The names of active and corresponding members shall be printed in the published *Proceedings*, or the *Yearbook* of the Association, with their respective educational titles, offices, and addresses.

ARTICLE II—ELECTION OF OFFICERS

SECTION 1. The President, Vice-Presidents, Treasurer, and Directors of the National Education Association of the United States shall be chosen by the active members of the Association by ballot, at their annual business meeting, a majority of the votes cast being necessary for a choice. They shall continue in office until the close of the annual meeting subsequent to their election, and until their successors are chosen, except as herein provided. The Secretary and the Treasurer shall enter upon their duties at a date which shall be determined by the Board of Trustees and which shall not be later than the first of October and shall continue in office during the terms for which they are separately chosen and until their successors are duly elected.

ARTICLE III—DUTIES OF OFFICERS

SECTION 1. The President shall preside at all meetings of the Association, and shall perform the duties usually devolving upon the chief executive of such an association. In his absence, the ranking Vice-President who is present shall preside; and in the absence of all Vice-Presidents a chairman *pro tempore* shall be elected. The President shall prepare the program for the general sessions of the annual meeting of the Association, and with the approval of the Executive Committee, shall determine the time and place of the general meeting of the Association and of the various departments not definitely fixed by these by-laws, and shall have the power to require such changes to be made in the programs of the Council and the departments as will promote the interest of the annual meeting. The President shall be a member *ex officio* of the Board of Trustees and chairman of the Board of Directors and of the Executive Committee. He shall sign all bills approved for payment by the Board of Directors, and all bills approved or authorized by the Executive Committee between the meetings of the Board of Directors. On the expiration of his term of office as President, he shall become first Vice-President for the ensuing year, and shall be chairman *ex officio* of the Committee on Publication.

SEC. 2. The Secretary shall keep a full and accurate record of the proceedings of the general meetings of the Association and all meetings of the Board of Directors and of the Executive Committee, shall conduct the business of the Association as provided in the articles of incorporation and the by-laws, and in all matters not definitely prescribed therein, shall be under the direction of the Executive Committee and in the absence of direction by the Executive Committee, shall be under the direction of the President, and shall receive or collect all moneys due the Association and pay the same each month to the Treasurer, shall countersign all bills approved for payment by the Board of Directors or by the Executive Committee in the interval between the meetings of the Board of Directors or on the approval of the President acting under authority of the Board of Directors, or Executive Committee. The Secretary shall have his records present at all meetings of the active members of the Association, of the Board of Directors, and of the Executive Committee. He shall keep a list of members as required by Section 9 of Article I of these by-laws and shall revise said list annually. He shall be secretary of the Board of Directors, and a member of the Committee on Publication. He shall be the custodian of all the property of the Association not in charge of the Treasurer and the Board of Trustees. He shall give such bond for the faithful performance of his duties as may be required by the Board of Trustees. He shall submit his annual report

to the Executive Committee not later than July 1 prior to the annual meeting of the Association, which report shall be transmitted to the Board of Directors at its annual meeting. At the expiration of his term of office, he shall transfer to his successor all moneys, books, and other property in his possession belonging to the Association. The Secretary shall not print, publish, or distribute any official report or other document without the approval of the publication committee.

SEC. 3. The Treasurer shall receive from the Secretary and under the direction of the Board of Trustees shall hold in safekeeping all moneys paid to the Association; shall pay the same only upon the order of the Board of Trustees; shall notify the President of the Association and the Chairman of the Board of Trustees whenever the surplus funds in his possession exceed five hundred dollars; shall keep an exact account of his receipts and expenditures, with vouchers for the latter; and said accounts, ending on the thirtieth day of June of each year, he shall render to the Executive Committee not later than July 1, and when approved by said committee, they shall be transmitted by the committee to the Board of Directors at the first regular meeting of the board held during the week of the annual meeting and to the active members at their annual business meeting. The Treasurer shall give such bond for the faithful performance of his duties as may be required by the Board of Trustees. At the expiration of his term of office, he shall transfer to his successor all moneys, books, and other property in his possession belonging to the Association.

SEC. 4. The Board of Directors shall elect corresponding members as prescribed by Section 8 of Article I of these by-laws, shall elect members of the National Council of Education as provided in Section 3 of Article IV of these by-laws, shall have power to fill all vacancies in its own body and in the Board of Trustees; shall recommend to the Executive Committee the place for holding the annual meeting of the Association, the Council of Education, and the departments. The Board of Directors shall approve all bills incurred under authority of the Board of Directors, the Executive Committee, or the President and Secretary acting under the authority of the Board of Directors or Executive Committee, shall appropriate from the current funds of the year the amounts of money ordered by the active members at their annual business meeting for the work of all special committees of investigation and research authorized and provided for by such active members at their annual business meeting, shall make a full report of the financial condition of the Association (including the reports of the Secretary, the Treasurer, and the Board of Trustees) to the active members at their annual business meeting, and shall do all in its power to make the Association a useful and honorable institution.

SEC. 5. The Executive Committee shall assist the presiding officer in arranging for the time and place of the annual meeting of the Association, of the National Council of Education, and of the various departments.

The Executive Committee shall recommend to active members at their annual business meeting the appointment of special committees for investigation or research, the subjects for which may have been suggested by the National Council or by the active membership of the National Education Association or by any of its departments; it shall recommend the amount of money to be appropriated for such investigations. When such special committees are provided for and duly authorized by the active members at their annual business meeting, the Executive Committee shall have general supervision of them; shall receive and consider all reports made by them and shall print such reports, and present the same, together with the reports received from the Secretary, the Treasurer, and the Board of Trustees and the recommendations of the Executive Committee thereon, to the active members at their annual business meeting. All such special committees shall be appointed by the President of the National Education Association.

The Executive Committee shall fill all vacancies occurring in the body of officers of the Association except vacancies in the Board of Directors, Board of Trustees, and the office of Secretary.

SEC. 6. The Board of Trustees shall require of the Secretary and Treasurer bonds of such amount as may be determined by said board, for the faithful performance of their duties, shall make a full report of the finances of the Association to the Executive Committee not later than July 1 prior to the annual meeting of the Association, which report shall be transmitted by the Executive Committee to the Board of Directors at the first regular meeting of the board held during the week of the annual meeting of the Association. It shall choose annually its own chairman and secretary.

ARTICLE IV—THE NATIONAL COUNCIL OF EDUCATION

SECTION 1. The National Council of Education shall discuss educational questions of public and professional interest; propose to the Executive Committee, from time to time, suitable subjects for investigation and research; have a report made at its annual meeting on "Educational Progress during the Past Year"; and in other ways use its best efforts to further the objects of the Association and to promote the cause of education in general.

SEC. 2. The National Council of Education shall consist of one hundred and twenty regular members, selected from the active membership of the National Education Association. Any active member of the Association is eligible to membership in the Council, and each member shall be elected for six years and until his successor is elected.

SEC. 3. The annual election of members of the Council shall be held at the time of the annual meeting of the Association. The Board of Directors of the Association shall annually elect ten members and the Council ten members, and each body shall fill all vacancies in its quota of members. No state, territory, or district in the United States shall have at one time more than seven regular members in the Council.

SEC. 4. The annual meeting of the Council shall be held during the week of the annual meeting of the Association.

SEC. 5. The absence of a regular member from two successive annual meetings of the Council shall be considered equivalent to his resignation of membership. Persons whose regular membership in the Council has expired shall be denominated honorary members of the Council during the time of their active membership in the Association, with the privilege of attending the regular sessions of the Council and participating in its discussions. A member who discontinues or forfeits his active membership in the Association forfeits his membership in the Council.

SEC. 6. The officers of the Council shall consist of a president, a vice-president, a secretary, and such standing committees as may be prescribed by its by-laws, all of whom shall be regular members of the Council. The secretary of the Council shall, in addition to performing the duties pertaining to his office, furnish the Secretary of the Association a copy of the proceedings of the Council for publication.

SEC. 7. The National Council of Education is hereby authorized to adopt by-laws for its government not inconsistent with the act of incorporation or the by-laws of the Association; *provided*, That such by-laws be submitted to, and approved by, the Board of Directors of the Association before they shall become operative.

SEC. 8. The powers and duties of the Council may be changed or the Council abolished upon a two-thirds vote of the Association taken at the annual business meeting of the Association; *provided*, That notice of the proposed action has been given at the preceding annual business meeting of the Association.

ARTICLE V—DEPARTMENTS

SECTION 1. The following departments are now (1913) in existence, to wit: The departments, first, of Superintendence; second, of Normal Schools; third, of Elementary Education; fourth, of Higher Education; fifth, of Manual Training, Art, and Technical Education; sixth, of Kindergarten Education; seventh, of Music Education; eighth, of Secondary Education; ninth, of Business Education; tenth, of Child Hygiene; eleventh, of Physical Education; twelfth, of Science Instruction; thirteenth, of School Administra-

tion; fourteenth, the Library Department; fifteenth, of Special Education; sixteenth, of School Patrons; seventeenth, of Rural and Agricultural Education; eighteenth, of Classroom Teachers.

SEC. 2. The active members of the Association, and no others, are members of each department of the Association.

SEC. 3. Each department shall hold its annual meeting at the time and place of the annual meeting of the Association, except the Department of Superintendence and the Department of Normal Schools, which may hold their annual meeting in February of each year or at such other times as may be determined by said departments, subject to the approval of the Board of Directors of the Association.

SEC. 4. The object of the meetings of the departments shall be the discussion of questions pertaining to their respective fields of educational work. The programs of these meetings shall be prepared by the respective presidents in conference with, and under the general direction of, the President of the Association. Each department shall be limited to two sessions, with formal programs, unless otherwise ordered by the President of the Association, except that a third session for business or informal round-table conference may be held at the discretion of the department officers.

SEC. 5. The officers of each department shall consist of a president, a vice-president, and a secretary, who shall be elected at the last formal session of the department to serve one year and until their successors are duly elected, and who shall, at the time of their election, be active members of the Association.

SEC. 6. The secretary of each department shall, in addition to performing the duties usually pertaining to his office, furnish the Secretary of the Association a copy of the proceedings of the meetings of the department for publication.

SEC. 7. All departments shall have equal rights and privileges, with the exception stated in Section 3 of this article. They shall be named in Section 1 of this article in the order of their establishment and shall be dropped from the list when discontinued. Each department may be governed by its own regulations in so far as they are not inconsistent with the act of incorporation or these by-laws.

SEC. 8. A new department may be established by a two-thirds vote of the Board of Directors taken at a regular meeting of the board or by a two-thirds vote of the active members at any annual business meeting; *provided*, That a written application for said department, with title and purpose of the same, shall have been made at the regular meeting of the board next preceding the one at which action is taken, or at the preceding annual business meeting, by at least twenty-five members engaged or interested in the field of labor in the interest of which the department is purposed to be established. A department already established may be discontinued by the Board of Directors upon a two-thirds vote taken at a regular meeting, or by a two-thirds vote of the active members at any business meeting of the active members; *provided*, That announcement has been made of the proposed action at a regular meeting of the board the preceding year, or at the preceding annual business meeting. A department shall be discontinued when it fails to hold a regular meeting for two successive years.

ARTICLE VI—COMMITTEES

SECTION 1. On the first day of each annual meeting of the Association the President shall appoint a Committee on Resolutions, consisting of seven active members, and a Committee on Necrology, consisting of five active members, and on the third day of such meeting he shall appoint a Committee on Nominations, consisting of one active member from each state, territory, and district represented at the meeting. Each state, territorial, and district representative shall be appointed on the nomination of the active members in attendance from said state, territory, or district; *provided*, That three or more active members participate in said nomination in accordance with these by-laws; and *provided further*, That in case of the failure of the active members of any state, terri-

tory, or district, to nominate a member of the nominating committee in accordance with these by-laws, the President shall appoint an active member from said state, territory, or district, to serve on said committee. At the regular meeting of the Board of Directors on the first day of the annual meeting, the President shall appoint an Auditing Committee consisting of three active members of the Association, no one of whom shall be either a trustee or a director; to this committee shall be referred the report of the expert accountant, together with the communication of the President transmitting the same, as provided in Section 6 of this article; and the committee shall report its findings at the meeting of active members. The chairman of each of the foregoing committees shall be designated by the President of the Association at the time of its appointment.

SEC. 2. The meetings of active members present from the several states, territories, etc., to nominate members of the nominating committee shall be held on the first day of the annual meeting of the Association, at such time and places as shall be designated on the annual program by the President of the Association.

SEC. 3. The Committee on Nominations shall meet on the fourth day of the annual meeting at 9:00 A.M., at a place designated by the President of the Association, and shall nominate persons for the following offices in the Association, to wit: one person for President, eleven persons for Vice-Presidents, one person for Treasurer, and one person from each state, territory, and district in the United States as a member of the Board of Directors. It shall report to the active members at their annual business meeting.

SEC. 4. The Committee on Resolutions shall report at the annual business meeting of active members, and, except by unanimous consent, all resolutions shall be referred to said committee, without discussion. This committee shall receive and consider all resolutions proposed by active members, or referred to it by the President; some time during the second day of the annual meeting of the Association the committee shall hold a meeting, at a place and time to be announced in the printed program, for the purpose of receiving proposed resolutions and hearing those who may wish to advocate them.

SEC. 5. The Committee on Necrology shall prepare for the published *Proceedings* a list of the active and corresponding members that have died during the year, accompanied by memorial sketches whenever practicable.

SEC. 6. Within thirty days prior to the time of the annual meeting of the Association, the President shall appoint a competent person, firm, or corporation licensed to do business as expert accountants; the accountants so appointed shall examine the accounts, papers, and vouchers of the Secretary, the Treasurer, and the Board of Trustees, and compare the same, and shall also examine the securities of the Permanent Fund held by the Board of Trustees. The report of the said accountants shall be filed with the President before the opening day of the annual meeting of the Association, and shall be by him submitted with such comments as he may think proper, to the Board of Directors, at their meeting held on the first day of the annual meeting of the Association.

ARTICLE VII—MEETINGS

SECTION 1. A stated meeting of the Association, of the Council of Education, and of each department shall be held annually at such time and place as shall be determined by the Board of Directors or the Executive Committee acting for the board in accordance with these by-laws. An annual meeting of the Association and its subordinate bodies may be omitted for an extraordinary cause, upon the written consent of two-thirds of the directors of the Association, obtained by the Executive Committee.

SEC. 2. The annual meeting of the Association shall be held in July, beginning on a day determined by the Executive Committee. Two sessions shall be held daily, unless otherwise ordered by the President of the Association. The annual business meeting of the active members shall be held on the fourth day of the annual meeting at 11:00 A.M.

A regular meeting of the Board of Directors shall be held on the first day of the annual meeting at 10:30 A.M. The first regular meeting of the new Board of Directors shall be held as soon as practicable and within twenty-four hours after the close of the last session of the annual meeting, the place and time of the meeting to be announced in the printed program. The Board of Trustees shall hold its annual meeting at some convenient time and immediately following the meeting of the new Board of Directors referred to above in this section. Special meetings of the trustees may be called by the chairman, and shall be called on request of the majority of the Board of Trustees. Due notice of all meetings of the Board of Trustees shall be given to every member of the board by the secretary thereof.

ARTICLE VIII—PROCEEDINGS

SECTION 1. The proceedings of the meeting of the Association, the Council, and the departments shall be published under the direction of a committee consisting of the President, the First Vice-President, and the Secretary, the First Vice-President acting as chairman of the committee; *provided*, That in the opinion of the Executive Committee the funds of the Association warrant the publication. Each member of the Association shall be entitled to a copy of the *Proceedings*. Associate members must make written application to the Secretary on or before November 1 for a copy in order to obtain it. Corresponding members, and active members whose dues are paid, will receive the published *Proceedings* without written application.

SEC. 2. No paper, lecture, or address shall be read before the Association or any of the departments in the absence of its author, without the approval of the President of the Association or of the departments interested, nor shall any such paper, lecture, or address be published in the *Proceedings*, without the approval of the Executive Committee.

ARTICLE IX—ELECTIONS, QUORUM

SECTION 1. The certificate of membership, in connection with the official list of active members, shall be accepted as evidence that members are entitled to vote.

SEC. 2. Representatives from twenty-five states and territories shall constitute a quorum in all meetings of active members and of the Board of Directors.

ARTICLE X—APPROPRIATIONS

SECTION 1. Unless otherwise ordered by the active members at their annual business meeting, not less than 10 per cent of the gross income of the Association each year shall be set aside for such educational investigations and studies as may be ordered in accordance with Section 5 of Article III.

ARTICLE XI—AMENDMENTS

SECTION 1. These by-laws may be altered or amended at the annual business meeting of the active members by unanimous consent, or by a two-thirds vote of the active members present if the alteration or amendment shall have been substantially proposed in writing at the annual business meeting next preceding the one at which action is taken; due announcement of the proposed action shall be made in the annual published *Proceedings*.

NATIONAL EDUCATIONAL ASSOCIATION

NOW KNOWN AS THE

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

CERTIFICATE

of Acceptance of Charter and Adoption of By-Laws under Act of Congress approved June 30, 1906.

We, the undersigned, Nathan C. Schaeffer, the presiding officer, and Irwin Shepard, the Secretary of the meeting of the National Educational Association held at Los Angeles, California, on the 10th day of July, 1907, said meeting being the annual meeting of the Association held next after the passage of an act of Congress entitled "An Act to Incorporate the National Education Association of the United States,"

Do hereby certify, that at said meeting held pursuant to due notice, a quorum being present, the said Association adopted resolutions of which true copies are hereto attached, and accepted the charter of the National Education Association of the United States, granted by said act of Congress, and adopted by-laws as provided in said act and elected officers; and the undersigned pursuant to said resolutions

Do hereby certify that the National Education Association of the United States has duly accepted said charter granted by said act of Congress, and adopted by-laws, and is the lawful successor to the National Educational Association.

In witness whereof, we have hereunto signed our names this 20th day of August, 1907.

NATHAN C. SCHAEFFER, *Presiding Officer*
IRWIN SHEPARD, *Secretary*

VERIFICATION

RESOLUTIONS ADOPTED BY THE ACTIVE MEMBERS, JULY 10, 1907

1. *Resolved*, That the National Educational Association hereby accepts the charter granted by an act of Congress entitled "An Act to Incorporate the National Education Association of the United States," passed June 30, 1906, and that the President and Secretary of this meeting be authorized and directed to execute and file with the Recorder of Deeds of the District of Columbia a verified certificate showing the acceptance by the Association of the charter granted by said act.

2. *Resolved*, That the proposed by-laws of which notice was given at the annual meeting of the Association held on July 6, 1905, which are printed in full in the journal of said meeting, be and the same are hereby adopted to take effect immediately.

3. *Resolved*, That the Association adopt as its corporate seal a circle containing the title "National Education Association of the United States," and the dates "1857–1907."

4. *Resolved*, That the Association do now proceed to elect officers, and to organize under the charter granted by the act of Congress.

Filed in the office of the Recorder of Deeds of the District of Columbia, September 4, 1907.

CALENDAR OF MEETINGS

NATIONAL TEACHERS ASSOCIATION

1857—PHILADELPHIA, PA. (Organized)
James L. Enos, Chairman.
W. E. Sheldon, Secretary.

1858—CINCINNATI, OHIO
Z. Richards, President.
J. W. Bulkley, Secretary.
A. J. Rickoff, Treasurer.

1859—WASHINGTON, D.C.
A. J. Rickoff, President.
J. W. Bulkley, Secretary.
C. S. Pennell, Treasurer.

1860—BUFFALO, N.Y.
J. W. Bulkley, President.
Z. Richards, Secretary.
O. C. Wight, Treasurer.

1861, 1862—No session.

1863—CHICAGO, ILL.
John D. Philbrick, President.
James Cruikshank, Secretary.
O. C. Wight, Treasurer.

1864—OGDENSBURG, N.Y.
W. H. Wells, President.
David N. Camp, Secretary.
Z. Richards, Treasurer.

1865—HARRISBURG, PA.
S. S. Greene, President.
W. E. Sheldon, Secretary.
Z. Richards, Treasurer.

1866—INDIANAPOLIS, IND.
J. P. Wickersham, President.
S. H. White, Secretary.
S. P. Bates, Treasurer.

1867—No session.

1868—NASHVILLE, TENN.
J. M. Gregory, President.
L. Van Bokkelen, Secretary.
James Cruikshank, Treasurer.

1869—TRENTON, N.J.
L. Van Bokkelen, President.
W. E. Crosby, Secretary.
A. L. Barber, Treasurer.

1870—CLEVELAND, OHIO
Daniel B. Hagar, President.
A. P. Marble, Secretary.
W. E. Crosby, Treasurer.

NAME CHANGED TO

NATIONAL EDUCATIONAL ASSOCIATION

1871—ST. LOUIS, MO.
J. L. Pickard, President.
W. E. Crosby, Secretary.
John Hancock, Treasurer.

1872—BOSTON, MASS.
E. E. White, President.
S. H. White, Secretary.
John Hancock, Treasurer.

1873—ELMIRA, N.Y.
B. G. Northrop, President.
S. H. White, Secretary.
John Hancock, Treasurer.

1874—DETROIT, MICH.
S. H. White, President.
A. P. Marble, Secretary.
John Hancock, Treasurer.

1875—MINNEAPOLIS, MINN.
W. T. Harris, President.
M. R. Abbott, Secretary.
A. P. Marble, Treasurer.

1876—BALTIMORE, MD.
W. F. Phelps, President.
W. D. Henkle, Secretary.
A. P. Marble, Treasurer.

1877—LOUISVILLE, KY.
M. A. Newell, President.
W. D. Henkle, Secretary.
J. Ormond Wilson, Treasurer.

1878—No session.

1879—PHILADELPHIA, PA.
John Hancock, President.
W. D. Henkle, Secretary.
J. Ormond Wilson, Treasurer.

1880—CHAUTAUQUA, N.Y.
J. Ormond Wilson, President.
W. D. Henkle, Secretary.
E. T. Tappan, Treasurer.

1881—ATLANTA, GA.
James H. Smart, President.
W. D. Henkle, Secretary.
E. T. Tappan, Treasurer.

1882—SARATOGA SPRINGS, N.Y.
G. J. Orr, President.
W. E. Sheldon, Secretary.
H. S. Tarbell, Treasurer.

1883—SARATOGA SPRINGS, N.Y.
E. T. Tappan, President.
W. E. Sheldon, Secretary.
N. A. Calkins, Treasurer.

1884—MADISON, WIS.
THOMAS W. BICKNELL, President.
H. S. TARBELL, Secretary.
N. A. CALKINS, Treasurer.

1885—SARATOGA SPRINGS, N.Y.
F. LOUIS SOLDAN, President.
W. E. SHELDON, Secretary.
N. A. CALKINS, Treasurer.

1886—TOPEKA, KANS.
N. A. CALKINS, President.
W. E. SHELDON, Secretary.
E. C. HEWETT, Treasurer.

1887—CHICAGO, ILL.
W. E. SHELDON, President.
J. H. CANFIELD, Secretary.
E. C. HEWETT, Treasurer.

1888—SAN FRANCISCO, CAL.
AARON GOVE, President.
J. H. CANFIELD, Secretary.
E. C. HEWETT, Treasurer.

1889—NASHVILLE, TENN.
ALBERT P. MARBLE, President.
J. H. CANFIELD, Secretary.
E. C. HEWETT, Treasurer.

1890—ST. PAUL, MINN.
J. H. CANFIELD, President.
W. R. GARRETT, Secretary
E. C. HEWETT, Treasurer.

1891—TORONTO, ONT.
W. R. GARRETT, President.
E. H. COOK, Secretary.
J. M. GREENWOOD, Treasurer.

1892—SARATOGA SPRINGS, N.Y.
E. H. COOK, President.
R. W. STEVENSON, Secretary.
J. M. GREENWOOD, Treasurer.

1893—CHICAGO, ILL.
(International Congress of Education)
ALBERT G. LANE, President.
IRWIN SHEPARD, Secretary.
J. M. GREENWOOD, Treasurer.

1894—ASBURY PARK, N.J.
ALBERT G. LANE, President.
IRWIN SHEPARD, Secretary.
J. M. GREENWOOD, Treasurer.

1895—DENVER, COLO.
NICHOLAS MURRAY BUTLER, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.

1896—BUFFALO, N.Y.
NEWTON C. DOUGHERTY, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.

1897—MILWAUKEE, WIS.
CHARLES R. SKINNER, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.

1898—WASHINGTON, D.C.
J. M. GREENWOOD, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.

1899—LOS ANGELES, CAL.
E. ORAM LYTE, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.

1900—CHARLESTON, S.C.
OSCAR T. CORSON, President.
IRWIN SHEPARD, Secretary.
CARROLL G. PEARSE, Treasurer.

1901—DETROIT, MICH.
JAMES M. GREEN, President.
IRWIN SHEPARD, Secretary.
L. C. GREENLEE, Treasurer.

1902—MINNEAPOLIS, MINN.
WILLIAM M. BEARDSHEAR, President.
IRWIN SHEPARD, Secretary.
CHARLES H. KEYES, Treasurer.

1903—BOSTON, MASS.
CHARLES W. ELIOT, President.
IRWIN SHEPARD, Secretary.
W. M. DAVIDSON, Treasurer.

1904—ST. LOUIS, MO.
JOHN W. COOK, President.
IRWIN SHEPARD, Secretary.
MCHENRY RHOADS, Treasurer.

1905—ASBURY PARK AND OCEAN GROVE, N.J.
WILLIAM H. MAXWELL, President.
IRWIN SHEPARD, Secretary.
JAMES W. CRABTREE, Treasurer.

1906—No session.

1907—LOS ANGELES, CAL.
NATHAN C. SCHAEFFER, President.
IRWIN SHEPARD, Secretary.
J. N. WILKINSON, Treasurer.

NAME CHANGED TO

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

1908—CLEVELAND, OHIO
EDWIN G. COOLEY, President.
IRWIN SHEPARD, Secretary.
ARTHUR H. CHAMBERLAIN, Treasurer.

1909—DENVER, COLO.
LORENZO D. HARVEY, President.
IRWIN SHEPARD, Secretary.
ARTHUR H. CHAMBERLAIN, Treasurer.

1910—BOSTON, MASS.
JAMES Y. JOYNER, President.
IRWIN SHEPARD, Secretary.
ARTHUR H. CHAMBERLAIN, Treasurer.

1911—SAN FRANCISCO, CAL.
ELLA FLAGG YOUNG, President.
IRWIN SHEPARD, Secretary.
DURAND W. SPRINGER, Treasurer.

1912—CHICAGO, ILL.
CARROLL G. PEARSE, President.
IRWIN SHEPARD, Secretary.
KATHERINE D. BLAKE, Treasurer

1913—SALT LAKE CITY, UTAH
EDWARD T. FAIRCHILD, President.
DURAND W. SPRINGER, Secretary.
GRACE M. SHEPHERD, Treasurer.

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

OFFICERS FOR 1912–13

GENERAL ASSOCIATION

EDWARD T. FAIRCHILD	*President*	Durham, N.H.
DURAND W. SPRINGER	*Secretary*	Ann Arbor, Mich.
GRACE M. SHEPHERD	*Treasurer*	Boise, Idaho

VICE-PRESIDENTS

CARROLL G. PEARSE, Superintendent of Schools	Milwaukee, Wis.
GUY POTTER BENTON, President, University of Vermont	Burlington, Vt.
MARTHA STROMBERG, School No. 22	Baltimore, Md.
WAITMAN T. BARBE, Professor of English, University of West Virginia	Morgantown, W.Va.
BURR W. TORREYSON, University of Arkansas	Little Rock, Ark.
HELEN MARSH WIXSON, State Superintendent of Public Instruction	Denver, Colo.
L. R. ALDERMAN, State Superintendent of Public Instruction	Salem, Ore.
AGNES E. HOWE, State Normal School	San José, Cal.
ADA VAN STONE HARRIS, Assistant Superintendent of Schools	Richmond, Va.
AMELIA C. FRUCHTE, First Assistant, Central High School	St. Louis, Mo.
CORNELIA S. HULST, English Department, Central High School	Grand Rapids, Mich.

BOARD OF TRUSTEES

JAMES M. GREENWOOD, *Chairman*	Kansas City, Mo.	Term expires in 1913
J. STANLEY BROWN	Joliet, Ill.	Term expires in 1914
ROBERT J. ALEY, *Secretary*	Orono, Me.	Term expires in 1915
JAMES Y. JOYNER	Raleigh, N.C.	Term expires in 1916
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JOURNAL OF PROCEEDINGS

OF THE

FIFTY-FIRST ANNUAL MEETING

OF THE

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

SALT LAKE CITY, UTAH, JULY 5–12, 1913

EDUCATIONAL SUNDAY

In accordance with an established custom, Sunday, July 6, was observed as Educational Sunday by a large number of the churches of Salt Lake City, on which date the respective pastors held special services, preaching sermons on educational topics as follows. All services were held in the forenoon unless otherwise noted.

"The Cost of Liberty"—Rev. Elmer I. Goshen, First Congregational Church.

"Education and the Heart Life"—Rev. P. A. Simpkin, Phillips Congregational Church.

"These Words of Mine"—Rev. R. M. Stevenson, First Presbyterian Church.

"The Two Bulwarks of American Liberty: The Free Church and the Free School"—Rev. Louis S. Bowerman, Immanuel Baptist Church.

"The Value of Religion in Education"—Rev. Samuel R. Colladay, St. Mark's Cathedral (Episcopal).

"Mind and Religion"—Rev. J. H. Mitchell, Iliff Methodist Episcopal Church.

"Life-Choices and How Education Helps"—Rev. D. E. Carter, Liberty Park Methodist Episcopal Church.

"A Liberal Education Our Nation's Safety"—Rev. Jared V. Cody, Burlington Baptist Church.

"The Public School and American Citizenship"—Rev. Berton F. Bronson, Rio Grande Baptist Church.

"Christ the Great Teacher"—Rev. C. R. Neel, Central Christian Church.

"Our Educational System"—Rev. Ward Winter Reese, St. Paul's Cathedral.

"Religious Educational Imperatives"—Rev. Frank O. Leonard, Third Presbyterian Church.

"Education"—Rev. W. K. Ryan, St. Mary's Cathedral.

"The Necessity of Moral Education"—Rev. J. J. McNally, St. Mary's Cathedral, at 7:30 P.M.

"Education of the Soul"—Rev. Michael Curran, St. Patrick's Church.

"America"—Children's Song and Flower Festival in the Tabernacle.

Address—Hon. P. P. Claxton, United States Commissioner of Education, Washington, D.C., in the Tabernacle, at 2:00 P.M.

"Mormonism and Education"—Mr. B. H. Roberts, in the Tabernacle, at 7:30 P.M.

Oratorio, "Creation," by Haydn—University Musical Society, Squire Coop, Director, in Salt Lake Theater, at 4:00 P.M.

FIRST DAY'S PROCEEDINGS

Opening Session—Monday Afternoon, July 7, 2:00 o'clock

The Fifty-first Annual Convention of the National Education Association was opened in the Tabernacle, Salt Lake City, Utah, at 2:00 P.M., on July 7.

Preceding the opening the following musical program was given:

1. A Birthday Song . . . . . *Woodman*
   Miss May O'Niel
2. Vision of Salome . . . . . *Brante*
   Bryan School Orchestra
   Mr. Lisle Bradford, Director
3. Prize Song (from "The Meistersinger") . . . . . *Wagner*
   Mr. John T. Hand
   Mr. J. J. McClellan, Organist

Vice-President Carroll G. Pearse, superintendent of schools, Milwaukee, Wis., presided at the opening of the session.

Invocation—Rev. J. E. Carver, First Presbyterian Church, Ogden, Utah.

Chairman Pearse then introduced the following speakers, who delivered addresses of welcome: Hon. William Spry, governor of the state of Utah; Hon. A. C. Nelson, state superintendent of public instruction, Salt Lake City, Utah; Hon. Samuel C. Park, mayor of Salt Lake City; and James T. Hammond, president of the Board of Education, Salt Lake City.

A response to the addresses of welcome was made by David B. Johnson, president of the Winthrop Normal and Industrial College, Rock Hill, S.C.

Following the addresses of welcome and the response, Chairman Pearse introduced to the audience Edward T. Fairchild, president, New Hampshire College, Durham, N.H., president of the National Education Association, and transferred to him the conduct of the convention.

At this point President Edward T. Fairchild delivered the presidential address of the year, which was entitled "The Future of the National Education Association."

Following the presidential address, President Fairchild introduced the following speakers, who delivered addresses as follows:

"What Shall We Do with the Single-Room School?"—M. P. Shawkey, state superintendent of public schools, Charleston, W.Va.

"Moral Values in Pupil Self-Government"—Henry Neumann, leader of the Brooklyn Society for Ethical Culture, Brooklyn, N.Y.

The following committees were announced by President Fairchild:

COMMITTEE ON RESOLUTIONS

James H. Baker, of Colorado, *Chairman*

Philander P. Claxton, of the District of Columbia
Martin G. Brumbaugh, of Pennsylvania
J. G. Crabbe, of Kentucky
Payson Smith, of Maine
Charles H. Johnston, of Illinois
Carroll G. Pearse, of Wisconsin
Leonard P. Ayres, of New York
Harold W. Foght, of the District of Columbia
Ellwood P. Cubberley, of California
Edwin G. Cooley, of Illinois

Irwin Shepard, of California, *Secretary*

COMMITTEE ON NECROLOGY

Thomas W. Bicknell, of Rhode Island, *Chairman*

William H. Smiley, of Colorado
Oliver S. Westcott, of Illinois
Josephine C. Preston, of Washington
R. H. Wilson, of Oklahoma

Following their appointment, the convention adjourned to Monday evening, the active members of the Association reassembling by states at 5:30 P.M. either in sections of the Tabernacle or at their respective state headquarters, for the selection of members of the nominating committee.

MONDAY EVENING, JULY 7, 8:00 O'CLOCK

Complimentary Concert

On Monday evening, July 7, at 8:00 o'clock, the following musical program was given in the Tabernacle:

1. Song of Welcome . . . . . *Stephens*
(Specially written for the occasion)
TABERNACLE CHOIR AND STEPHENS CONCERT CHORUS
MR. EVAN STEPHENS, Director
MR. J. J. MCCLELLAN, Organist
2. Fantasie on Faust . . . . . *Gounod-Sarasate*
Violin Solo, MR. WILLIAM C. CLIVE
Accompanist, MR. CLIFFORD C. CLIVE
3. The Pioneers . . . . . *Stephens*
MR. HORACE S. ENSIGN
4. (*a*) Selections from "Cavalleria Rusticana" . . . . . *Mascagni*
(*b*) Andantino, "To My Wife" . . . . . *Lemare*
MR. J. J. MCCLELLAN, Organist
5. Fierce Flames Are Soaring (from "Il Trovatore") . . . . . *Verdi*
MRS. EMMA RAMSEY MORRIS
6. Sextet from "Lucia" . . . . . *Donizetti*
TABERNACLE CHOIR, NEW YORK TOUR CHOIR, SOLOISTS, AND GREAT ORGAN
7. Hallelujah (from "Messiah") . . . . . *Handel*
TABERNACLE CHOIR AND GREAT ORGAN

SECOND DAY'S PROCEEDINGS

SECOND SESSION—TUESDAY FORENOON, JULY 8, 9:00 O'CLOCK

Preceding the addresses of the morning, the following musical recital was given by the children of the third and fourth grades of the Salt Lake City public schools:

MR. W. A. WETZELL, Director

1. (*a*) A Story
(*b*) The Violet
(*c*) Lullaby
2. (*a*) The Balloonman
(*b*) Goodnight
(*c*) All thru the Night
3. (*a*) Dreamland
(*b*) Bye Baby Bye
(*c*) Indian Lullaby
4. (*a*) Evensong
(*b*) Robin's Journey
(*c*) Goodnight
5. (*a*) Swanee River
(*b*) Old Kentucky Home
(*c*) Star Spangled Banner

After the musical recital, the meeting was called to order by President Fairchild, and the following addresses were given:

"The Personal Element in Our Educational Problems"—William H. Campbell, principal of D. S. Wentworth School, Chicago, Ill.

"The High-School Period as a Testing-Time"—Clarence D. Kingsley, high-school inspector, Massachusetts Board of Education, Boston, Mass.

At this point a chorus from the Provo schools, under the direction of J. R. Boshard, supervisor of music in Provo high and city schools, presented the following musical program:

MR. J. R. BOSHARD, Director

1. June . . . . . *Riley*
SELECTED CHORUS FROM THE PROVO SCHOOLS
2. The Passing of the Heart . . . . . *Riley*
MR. CHARLES R. JOHNSON
(Violin and Cello Obligato)
3. When the Frost Is on the Pumpkin . . . . . *Riley*
CHORUS FROM THE PROVO CITY SCHOOLS
MR. CLAIR W. REED
Brigham Young University, Provo, Utah, Composer

Addresses were then delivered as follows:

"Teaching and Testing the Teaching of Essentials"—Thomas E. Thompson, superintendent of schools, Leominster, Mass.

"The Schoolhouse Evening Center: What It Is, What It Costs, and What It Pays"—Lee F. Hanmer, director, Department of Recreation of the Russell Sage Foundation, New York, N.Y.

Tuesday Afternoon and Evening, July 8

Tuesday afternoon was given over to a reception at Saltair. In the evening Arthur H. Chamberlain, managing editor of the *Sierra Educational News*, San Francisco, Cal., gave an illustrated lecture on "Our Western Wonderlands."

THIRD DAY'S PROCEEDINGS

Third Session—Wednesday Evening, July 9, 8:00 o'clock

Preliminary to the opening of the session, the following musical program was given:

1. Ensemble (from "Chimes of Normandy") . . . . . *Planquette*
   Springville High School Chorus. Mr. Mark Robinson, Director
2. Jewel Song (from "Faust") . . . . . *Gounod*
   Miss Cora Thorne
3. Sweetest May . . . . . *Evans*
   Ladies' Glee Club, Springville High School

The meeting was called to order at 8:00 o'clock by President Fairchild, and the following program presented:

"Measuring Results"—L. R. Alderman, superintendent of city schools, Portland, Ore.

"The New Rural School"—Neil C. Macdonald, state inspector of consolidated schools, Valley City, N.Dak.

"Education as the Interpretation of Life"—Mary C. C. Bradford, state superintendent of public instruction, Denver, Colo.

At the close of the program, President Fairchild announced the following Committee on Nominations:

COMMITTEE ON NOMINATIONS

Jacob A. Shawan, of Ohio, *Chairman*

A. J. Matthews.....Arizona	E. T. Fairchild.....New Hampshire
George B. Cook.....Arkansas	M. P. E. Groszmann..New Jersey
Emma J. Breck.....California	Rupert F. Asplund...New Mexico
Anna L. Force.....Colorado	Leonard P. Ayers....New York
Charles D. Hine.....Connecticut	J. I. Foust.....North Carolina
A. C. Monahan.....Dist. of Col.	Edith E. Brant.....North Dakota
George M. Lynch.....Florida	Jacob A. Shawan.....Ohio
Grace M. Shepherd.....Idaho	F. W. Wenner.....Oklahoma
W. W. Earnest.....Illinois	Viola Ortschild.....Oregon
John W. Cravens.....Indiana	H. H. Baish.....Pennsylvania
E. C. Bishop.....Iowa	T. W. Bicknell.....Rhode Island
M. E. Pearson.....Kansas	D. B. Johnson.....South Carolina
J. G. Crabbe.....Kentucky	W. I. Early.....South Dakota
Robert J. Aley.....Maine	A. A. Strock.....Tennessee
Martha Stromberg.....Maryland	E. J. Matthews.....Texas
A. L. Williston.....Massachusetts	Orson Ryan.....Utah
John G. Welsh.....Michigan	Mason S. Stone.....Vermont
Julia H. Vaughan.....Minnesota	H. B. Dewey.....Washington
E. E. Bass.....Mississippi	J. C. Shaw.....West Virginia
W. T. Carrington.....Missouri	Ellen C. Sabin.....Wisconsin
S. D. Largent.....Montana	C. A. Duniway.....Wyoming
Fred M. Hunter.....Nebraska	George N. Briggs....Philippine Islands
J. E. Bray.....Nevada	

FOURTH DAY'S PROCEEDINGS

FOURTH SESSION—THURSDAY EVENING, JULY 10, 8:00 O'CLOCK

The following musical program was presented before the opening of the session:

1. What the Chimney Sang . . . . . *Parks*
B.Y.U. MALE QUARTET, Provo
2. Thine . . . . . *Bohm*
MISS CLARINDA HOLMAN, Provo
3. Andante Cantabile . . . . . *Tchaikowsky*
B.Y.U. STRING QUARTET, Provo

The convention was called to order at 8:00 P.M. by President Fairchild, and the program of the evening presented as follows:

"Some Social Uses of Education according to Nature"—William Estabrook Chancellor, editor of *School Journal*, New York and Chicago.

"The School Plant as a Public-Health Asset"—Caroline Bartlett Crane, social and sanitary expert, and investigator of municipalities, Kalamazoo, Mich.

"Education for Freedom"—Charles Zueblin, publicist, Boston, Mass.

"Rural Betterments"—Perry G. Holden, director, Agricultural Extension Department, International Harvester Company, Chicago, Ill.

FIFTH DAY'S PROCEEDINGS

FIFTH SESSION—FRIDAY EVENING, JULY 11, 8:00 O'CLOCK

The opening of the session was preceded by the following musical program:

1. Lead Kindly Light . . . . . *Dudley Buck*
Imperial Male Quartet—MESSRS. ASHWORTH, GRAHAM, CHRISTOPHERSON, AND SQUIRES
2. A French Peasant Song . . . . . *Eva del Acqua*
MISS EDNA EVANS
3. (*a*) I Heard the Voice of Harpers (from the "Holy City") . . . *Gaul*
Soprano Solo, MRS. CHARLES DAILY Baritone Solo, MR. HORACE S. ENSIGN
Organ, Harp, and Piano Accompaniment
MR. J. J. MCCLELLAN, Organ
MRS. WALTER TUTTLE, Harp
MISS ROWENA KORNS, Piano
(*b*) All Kinds of Women . . . . . *Brackett*
4. Cupid Has Found My Heart . . . . . *Anon*
MR. FRED C. GRAHAM

President Fairchild called the meeting to order at 8:00 P.M.

The following addresses were presented:

"The National Bureau of Education"—P. P. Claxton, United States commissioner of education, Washington, D.C.

"The Teaching of Civics in Elementary and Secondary Schools"—J. Lynn Barnard, professor of history and government, School of Pedagogy, Philadelphia, Pa.

"The Advance Movement of Teachers of English"—James F. Hosic, head of English Department, Chicago Normal College, Chicago, Ill., and secretary of the National Council of Teachers of English.

"The High School and Democracy"—Thomas Jesse Jones, specialist, Bureau of Education, Washington, D.C.

President Fairchild announced that Joseph Swain, president of Swarthmore College, Swarthmore, Pa., president-elect of the National Education Association, had been called home by reason of severe illness in his family, but had left with him the following message to the Association:

I was once present at the installation of Mr. Reid as speaker of the House of Representatives. The House and galleries were packed with a distinguished body of representative men and women. As he came up the aisle and took his place at the speaker's desk, there was prolonged applause, as was his desert.

As well as I remember this brilliant scene, I also remember equally well this sentence in his speech: "The honor is for a moment; the care and responsibility for many weary days and nights."

This is the feeling of any worthy man when he enters on a high public duty. I am highly sensible of the great honor you bestow on me in electing me to the presidency of the National Education Association. I am more sensible of the responsibility which you have placed upon me. For this confidence you have shown me, you have my cordial thanks; to help carry this responsibility, I ask your hearty support, best thought, and energy.

No extended remarks are necessary at this time. I wish to express briefly the spirit in which I shall endeavor to perform my task.

The thing for which I pray is vision, for without vision the people perish. There is a vision of the past, a vision of the present, and a vision of the future. The vision of the past is a vision of history; one who places his first emphasis on this vision is a conservative; a conservative has his place, and an important place, in calling attention to the lessons of the past, but if he does not go farther, he falls short of the best.

The vision of the present is the vision of science; with the telescope in the heavens above, and the microscope in the earth below, the scientist sees the universe as it is. That one who sees this vision only, and neglects the vision of the past, also fills an important place—yes, a very important place—yet falls short of the best.

The prophet is the man who out of the vision of the past and the vision of the present can see the vision of the future, and point out the pathway along which our feet must be guided.

This Association has a noble past, it is doing a marvelous work in the present, and I invite all teachers, north, south, east, and west, to study these two visions and out of them build the vision of the future in the interests of the children—the hope of America. One God, one country, and a united Association, for the promotion of the best!

Again, for the honor of the moment, I thank you; with a sense of the responsibility which comes with this duty, I seek your consecration to, and loving service in, the glorious future, which should be more glorious than our present dreams.

President Fairchild, after brief remarks of cordial thanks to all members of the Association for co-operation during the year just over, announced the adjournment of the Fifty-first Convention of the National Education Association.

DURAND W. SPRINGER, *Secretary*

GENERAL SESSIONS OF THE ASSOCIATION

ADDRESSES OF WELCOME

I. WILLIAM SPRY, GOVERNOR OF THE STATE OF UTAH, SALT LAKE CITY, UTAH

The distinction which comes to the people of Utah thru this meeting of the National Education Association is deeply sensed. We have looked forward with keenest anticipation to the day when it would fall to our lot to entertain one of the important national conventions; and we are sincerely grateful for the honor and pleasure of entertaining the organized forces of the greatest of all American institutions—the public school.

We welcome you because you are engaged in the labor that is nearest and dearest to the hearts of the people of Utah, because your very presence will lend inspiration in a work which we regard as the greatest factor in the nation's civil, social, economic, and political attainments; we welcome you because you are laboring to remove from life that which is coarse and rude and attain that which is delicate, elegant, and beautiful—because you are striving for the development of the best qualities of man's physical, mental, moral, and spiritual nature and the cultivation of the graces of speech and manner—the expressions of the refined nature.

We welcome you because you represent a great system toward eligibility to full membership in which our pioneer fathers and mothers labored with noble self-sacrifice and devotion, overcoming the hindrances of pioneering and succeeding in the work of mental development by vigorous action and burning earnestness, coupled with faith, courage, and hopefulness.

We welcome you because we want the atmosphere of your calling, the influence of your deliberations, the benefit of your conclusions, and the inspiration of your presence.

The benefits of culture and refinement—the jewels in the crown of human happiness—that are bestowed thru education are highly prized by the people of Utah. The distinction that comes to men and women thru careful training and education has rested upon Utah's sons and daughters in rich abundance, and their achievements in the creative work of the artist have reflected credit on the efforts of the people of Utah toward systematic development and cultivation of the mind and other natural powers.

Those of us whose lives have been less distinguished and whose activities have been confined to the ordinary affairs, find great joy and satisfaction in the pursuit of our daily tasks because of that assurance and confidence which our schooling has afforded. And it is this widely distributed sense of security in culture that renders the people of Utah loyal to our educational system. The opportunities, which, at great sacrifice, have been afforded to

all our people along educational lines have developed in Utah a generation of men and women who place the harmonious development of the faculties above all else. It is their love for culture and refinement that finds expression in a material support of the educational system of the state that is nothing short of remarkable.

After the adjournment of the recent legislative session, consideration of the revenue and appropriation bills led to a calculation of the state's educational expenditures for the years 1913–14. It disclosed that of the entire estimated tax revenue to the state for these years 86 per cent would be devoted to education. The figures were so astounding that I have recently caused them to be rechecked, and discover that in tabulating educational expenditures to be made from the revenues of these two years, appropriations to cover interest and redemption funds for bonds issued and sold for the benefit of our educational institutions had been overlooked, and it now develops that of the total estimated state tax revenue for the years 1913–14, 88.1 per cent will be expended for education.

We are modestly hopeful that close personal investigation of the educational system of Utah—one of the youngest of the western states—may afford ideas in your work, or if not ideas, at least an inspiration that will lead to greater efficiency in conducting the great work in which you are engaged.

Having undertaken the long journey to Salt Lake City to participate in the deliberations of this convention you will, we sincerely trust, avail yourselves of the opportunities which are afforded for that physical and mental relaxation that is found only close to nature.

Salt Lake City is in the very heart of the scenic wonderland of the world. A few hours' ride from this city will reveal to you the handiwork of nature in all her strange and varying moods. The majestic mountains which surround this valley are but spurs of a mighty range that zigzags across the entire state. In this range are snow-capped peaks that pierce the very clouds; there are precipitous slopes and rugged steeps that put to shame many ranges made famous by systematic advertising. This valley, with its verdure and its picturesque setting, is but one of many such beauty spots, pocketed in these everlasting hills. The mountain streams rippling from the gorges of the surrounding hills are but the heritage of this one valley. There are hundreds of valleys in Utah, fed and succored by sparkling brooks, whose invitation is the appeal irresistible to him who loves the scent of the delicate mountain wild flower, the whispering of mountain foliage, the pungent odor of the pine, the glint of sun upon diamond-clear dew, the cool breath of spring waters, the song of the robin, the cooing of the dove, the flash of the trout. This lake, lying a few miles west of you, is one of the wonders of America. A dip in its briny waters is an experience that cannot be had in any other part of the world. Delightful, refreshing, healthful, invigorating, the Great Salt Lake is a wonderful

restorative, while the gorgeous splendor of sunset over its waters is incomparable.

Again I say you are welcome to Utah, and the hand of cordial good-fellowship is extended to you.

II. A. C. NELSON, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, SALT LAKE CITY, UTAH

For nearly two decades has Utah longed for this happy day; longed for the opportunity to welcome as her distinguished guests this great convention of the men and the women who contribute so surely, so richly, and so abundantly to our national safety and perpetuity. In behalf of teachers of this state, it is my pleasure to extend to you the hand of fellowship and to bid you a hearty and cordial welcome to this great intermountain empire.

I bid you welcome to the land of the Pioneers!

In 1847 they arrived in this valley, footsore and weary, after a forced march of more than one thousand miles, over dreary plains and thru canyons scarcely known to the white man. As they reached the summit of yonder mountain, their illustrious leader and colonizer, Brigham Young, of whom modern history records no equal, after gazing on the valley below, said: "This is the place, drive on." With keen insight and intuition, he saw the wonderful possibilities of this region of which it had been said: "I will give one thousand dollars for the first bushel of corn grown there."

Here gold was not picked up from river-beds, neither were flowers and fruits brought forth as if by magic. The parched soil, with savage red men everywhere threatening destruction, made the struggle for existence a stupendous task. But with marked intelligence, unparalleled fortitude, and industry, in time the desert was transformed into fruitful fields and comfortable homes, and into these homes and surroundings the people of Utah now bid the great National Education Association welcome.

Here you will meet an intelligent and big-hearted people, eager to receive your instructions and to contribute to your comfort and happiness. Here in this beautiful inland city you will find a cosmopolitanism unequaled in any other city of its size. Here more than fifty years ago activities began which laid the foundation of a social center for this intermountain country. Churches of various denominations were established, public schools became common, theaters were built, the drama was fostered, and wholesome amusements were provided for all citizens. From practically every civilized nation people came to make for themselves new homes in this valley. Today the teachers in the public schools of Salt Lake City come from more than one-half the states of the Union. Thus has cosmopolitanism been developed, the spirit of brotherhood strengthened, and a city built which is well prepared to appreciate the message of this great organization.

Here you will gather strength and inspiration from the majestic Wasatch, the wizard of the Rockies, whose peaks tower high toward heaven. Here in these verdant valleys, whose fertility now excels that of the valley of the Nile, you will be made to feel that barren and waste places everywhere can be made to blossom like the rose.

There in the Great Salt Lake, while floating with perfect ease, in the glee of enjoyment, you will have all your sins washed away and become fit subjects to dwell in Zion—if you repent. You will receive that tone and vigor which, thruout life, will distinguish each of you as one of America's wise and fortunate educators who attended the National Education Association convention, held at Salt Lake City, Utah, in the year of our Lord, 1913.

In your deliberations of the week, you will not be unmindful of the fact that the present is a day of unusual unrest; time-honored customs and traditions are being disregarded; long-established institutions are challenged and old organizations are threatened. This spirit of unrest is not confined to social, religious, and political activities alone, but it also invades our educational institutions. The educational systems of the past have undergone marked changes and the ideals of the present are being questioned seriously. Critics are everywhere; some condemn the present and longingly wish for a return of the best of the past; others fail to find virtue in the past records of mankind and proceed to the advocacy of utopian theories—panaceas for all defects or evils.

Today, as rarely ever before, are needed poise, sanity, and discrimination to withstand some of the alluring influences of ultra-radicalism, and yet possess the power and insight necessary to discern the fact that while this is an age of agitation it is also an age of progression, rich in its contribution to the happiness and welfare of mankind. This progress comes in spite of radicalism, nor is it deterred by conservatism.

In education, growth has been steady and upward during the last decade, and while the public schools of our country have been subjected to criticism of all degrees of unkindness and violence, their efficiency has steadily increased. Criticism, to be helpful, must be intelligent, frank, and founded on facts. Many who have been most ardent in their denunciations of the work of the schools unfortunately have been ill-informed and sometimes wholly ignorant in regard to the true conditions. Constructive criticism is always wholesome and should be welcomed. In the educational field we shall always have some faddists who would, however honest their motives may be, if they had the power, divert our schools from their legitimate and intended purpose. They are rich in innovations. They long for changes and revolutions; yet their work has not been without avail, but must be guarded with caution.

However harmful or helpful educational speculation may be, this important convention, which is or should be our national educational clearing-house will not lose sight of the fact that there is a well-defined

field of operation for our schools. However they may develop or increase their scope of endeavor, there is one position from which they can never depart without seriously impairing the very structure of our commonwealth and without disappointing the fond anticipations of the founders of our American institutions. Our elementary schools must give the child a knowledge of what may be called the "tools" of education. He should be trained to use these tools intelligently. In a democracy these are a part of his birthright and no system of education must deprive him of this sacred right. In all of our schools, from the lowest to the highest in grade, pupils must be trained morally, ethically, and socially. They must learn the greatest art of all arts, that of living together in peace and harmony with their neighbors. They must learn that their neighbors have rights as well as they and that to respect these rights is a sacred American duty. Whatever changes the future may see in our schools, it will always be the function of the schools to inculcate a deep and abiding regard for civic righteousness; in fact the very measure of our schools must finally rest upon this function. They must give to society staunch, able, intelligent, and dependable citizens.

Again I bid you welcome.

RESPONSE TO ADDRESSES OF WELCOME

DAVID B. JOHNSON, PRESIDENT OF WINTHROP NORMAL AND INDUSTRIAL COLLEGE, ROCK HILL, S.C.

I esteem it a special privilege and honor to respond to these cordial words of welcome on behalf of the teachers and schools of this great common country of ours, represented by those in attendance upon this fifty-first annual meeting of the National Education Association, gathered together here for conference for the common good from the North, the South, the East, and the West, and from the teaching forces of all kinds of educational institutions—the elementary and secondary schools, the normal schools, colleges, and universities.

I rejoice that the time has come when it is possible for one from the original secession state to speak from the heart on an occasion of this kind for the great patriotic constructive forces of our reunited country.

Not among the least of the services rendered by the National Education Association to the betterment of the national life should be counted its contribution to the harmonizing of the sections. It has offered a common ground where the educational leaders of all sections could meet together, and has helped materially toward a friendly understanding between the sections.

I rejoice that this meeting of the National Education Association is being held out here in the mighty West where the breadth of the country seems to give breadth of view and the great altitudes seem to lift one above the little petty things of life. We shall all be better in our outlook upon life's

duties and for their performance for having been here in contact with the bigness and strength and inherent honesty of western life and character.

In all of the great educational progress of the past half-century in this country, this National Education Association has had a most notable and honorable part. It has contributed no little to the improvements in public education required to enable it to meet the needs of a growing and changing civilization. It has led the way in some of the most vital educational reforms of modern times. It has helped to give a new meaning to education—that it is a preparation of the individual for the duties of life in his environment. It is now generally agreed that a school must be related to the life of a people served by that school. The teacher now who cannot relate his school to community activities and interests and make it felt in the homes and lives of the people is no longer considered a good teacher and is not called up higher.

At the annual meetings of recent years, the great dominant questions have been those relating to rural, agricultural, and vocational education, all bearing vitally upon the welfare of the people, and, as a result, remarkable development has taken place in these lines of educational effort all over this country with inestimable advantage to our people. The old vicious way of educating boys and girls in the country to be discontented with country life is being discontinued. Experimental rural schools are being conducted where a course of study specially adapted to rural needs and conditions is being worked out. There is now common agreement with Gifford Pinchot in the opinion that "no nation can continue to prosper unless its civilization is built upon the abiding foundation of a strong and satisfied life in the open country."

There was a time when it was considered anything but scholarly or high-minded for a student to choose a course of study that might by any manner of means have any direct bread-and-butter value. That time is rapidly passing, thanks, in great measure, to the leadership of this Association, and it is now very generally seen that a bread-and-butter subject may have educational value as well as Greek or some other similar subject, and even greater educational value. We are breaking away from monk-made methods and standards in education. China tried an educational system without anything of the practical or concrete in it for over two thousand years, and in consequence stood still for that length of time. It is just now recognizing its error. We do not wish to repeat China's educational mistake—made and persisted in to the terrible undoing of that great country.

This Association has dignified and elevated the teacher's calling, has secured a clearer understanding of the fact that the good teacher makes the good school, has helped and is helping to secure for woman the place and recognition due her in all educational endeavor.

This Association has always stood for higher standards and ideals in education, has given its powerful aid to the acceptance of the conception of

education as including character-building as well as intellect-training while not ignoring the training of the hands to work and the training of the whole child for service—the head, the hand, and the heart.

I hope we shall never allow our interests in the very important subjects of industrial education, manual training, agriculture, rural schools, vocational training, and others of equal importance to cause us to lose or lack interest in the most vital work of the schools—moral training or character-building. If the schools should do successfully everything else demanded of them, and should fail to produce upright, honest, law-abiding, public-spirited, moral, responsible, dependable citizens, they would fail miserably in their duty to pupils, state, and society, and could not justify their existence. Education alone does not necessarily make a better man or a better citizen. "It may graft upon the wolf the qualities of the fox."

There are those who insist that moral and religious training should be left to the home and the church. The home and the church should not be relieved of their responsibility in this matter in any sense, but the home and the church do not seem to be able to do this work alone—the home often is not controlled by right ideals, is not equipped for moral training, and the church reaches only a small proportion of the people.

Moral education can be given in the regular management of the school and in the teaching of the regular studies to the great improvement of the management and teaching. After all is said and done, however, the most important agency for securing moral training in the public schools is the personality of the high-minded, devoted teacher. Actions speak louder than words to everybody, but especially to children. Gladstone has well said: "One example is worth a thousand arguments."

To make sure of moral training for the schools, teachers of the highest character must be secured and retained for them. We must see to it that our best men and women teach and to that end that the social position and rewards for the teacher are equal, to say the least, to those of other callings and professions.

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

THE FUTURE OF THE NATIONAL EDUCATION ASSOCIATION

EDWARD T. FAIRCHILD, PRESIDENT OF NEW HAMPSHIRE COLLEGE, DURHAM, N.H.; PRESIDENT OF THE NATIONAL EDUCATION ASSOCIATION

For half a century the National Education Association has contributed in large measure to educational practice and opinion in the United States. On its rolls may be found the names of our most eminent educators, scientists, writers, and statesmen. The range of subjects discussed covers

every topic embraced in the educational program, and the volumes of *Proceedings* constitute a complete record of the evolution of American education for that period.

Of the army of great scholars who have given freely of their experience and ability to make this Association the largest and most helpful educational agency in the world, many have departed and now sit at the feet of the Great Teacher. Of the dead what a notable list! Hagar, Barnard, Calkins, Wickersham, Hancock, Tappan, Raab, Harvey, Rickoff, Sheldon, Beardshear, Stevenson, White, Canfield, Soldan, Harris, Draper. What a flood of memories the names of these illustrious scholars call forth, and what splendid service they rendered to the Association and to the world!

Among those who are still living and whose names are intimately connected with the history of the National Education Association are many who have grown gray in the service and who, together with a host of others, have helped to make this a *national* convention, a source of information, and a center of influence in the great work of human improvement thru the public school and the college.

The spirit which has dominated the Association for all these years is well expressed in the original call for a convention to organize the National Teachers' Association in 1857. It invites "all practical teachers in the North, the South, the East, and the West, who are willing to unite in a general effort to promote the general welfare of our country by concentrating the wisdom and power of numerous minds and by distributing among all the accumulated experience of all; who are ready to devote their energies and their means to advance the dignity, respectability, and usefulness of their calling; and who, in fine, believe that the time has come when the teachers of the nation should gather into one great educational brotherhood."

Horace Mann, sixty-four years ago, before a convention of teachers and superintendents of public schools in Philadelphia, with wide vision spoke these prophetic words, which may so justly be used as descriptive of the purposes and aims of the National Education Association:

> By a national organization of teachers, great and comprehensive plans may be devised, to whose standard each state may be gradually brought into conformity.

In describing further the possibilities of organization, he says:

> These advantages pertain to the head, to our ability to conduct the great work of education in the wisest manner and with the most beneficial results. But the heart may be as much warmed as the head is instructed. By the communion and sympathy of assemblies like this we can not only enlighten the guiding forces of the mind, but we can generate the impulsive forces of the heart. We can not only diffuse new intelligence, but we can excite new enthusiasm. Thruout the whole country the machinery of education needs to be increased in strength and worked by a mightier power. In all material interests we are proverbial as a people for our enterprise. Let us seek for our country the higher honor of becoming proverbial in our regard for moral and spiritual interests.

Let us devise systems of education that shall reach every child that is born in the land, and, wherever political privileges exist, let the intelligence be imparted and the virtues inculcated which alone can make those privileges a blessing.

Surely these are the principles which this Association has so long and so zealously sought to establish.

It were an impossible task to set forth in full the invaluable service of this great Association to education. It has concerned itself not alone with the details of the schoolroom, but its discussions have included scores of subjects related to human uplift and to human progress. The addresses that have been heard from year to year have served as an inspiration to thousands of the teaching force of America and have found an answering chord in the hearts of multitudes of America's fathers and mothers. Not only have those who have been so fortunate as to attend its meetings been greatly profited and inspired to wiser and higher effort, but its printed words have mightily multiplied its influence and its power to give direction to educational method.

In its day and generation the National Education Association served its purpose nobly and fittingly. It was not to be expected, however, that the founders of this Association should foresee the marvelous social and industrial changes which a half-century has brought forth. The present is in harmony with the best traditions of the past and the activities of today represent an intelligent attempt to meet these newer demands.

No other part of the work of this Association is of greater value than that performed thru special committees.

Many of these reports are truly epoch-making and are yielding results of first importance.

The past is glorious; the present, satisfying; but the future must bear out the prophecies of the past. New conditions confront us. The twentieth century comes, bearing new problems, which must be settled in a new way.

A crisis period has been reached in American education, as in American politics. Ideals are changing; science and industry are pressing home on our educators the need of an enlarged conception of the function of the school. The whole nation is astir with social questions of profoundest importance. In response to these human needs scores of scientific investigations have been instituted. Benevolent wealth has made possible careful studies of modern conditions, resulting in a vast fund of useful information. The multiplication of societies and associations for the betterment of the physical, the mental, and the spiritual man is the glory of the age.

And the spirit of investigation has entered into the schoolmaster. In many ways he is endeavoring to disclose the strength or the weakness of the traditional scheme of education. The central fact of the schoolroom—the child—has become an object of profound study. Effort is made to deter-

mine the relative value of the various courses of study. A serious and purposeful investigation of the question, "How much is the information and drill of the school transformed into available power and skill?" is in progress. Withal there is everywhere a demand that the acid test be applied to our public schools and institutions of higher learning. The public wants to know. They have heard that what one would see in a nation must first be put into the schools. Many are dissatisfied and are asking whether the schools are at fault.

In a progressive age like ours, in the midst of profound social and economic changes, it would be folly to say that our educational system is perfect. The constant facts of history controvert such an opinion. The public mind is no longer a unit in approving our educational system. Curiously enough, the recognition of needed readjustment in our schools and churches comes most often from the layman. The church, which should be the leader in social and moral development, is just beginning to realize its opportunity. It is comprehending at last that a helpful and vital influence upon the people can only be acquired thru intimate and sympathetic interest in their economic and social welfare. It is the sane and practical activities of organizations without the church that have forced this truth upon the Christian world. And the church is slowly perceiving that the satisfying of temporal needs must precede or accompany religious progress.

In matters educational we are in much the same position as the church. We are living under a new dispensation. Economic conditions have undergone marvelous changes within a few years. The citizen of today is facing conditions wholly unknown to the men of yesterday, and is demanding a training for his children that shall adequately fit them, physically, mentally, and morally, for the duties of the hour. This command comes not so much from the schools as from the supporters of the schools. As in the case of the church, it is the laymen who are insisting on a revised scheme of education. How then shall these mandates of this new civilization be met? What part shall the National Education Association play in this period of incredible transition? Is this Association growing in influence with the years and keeping step in the march of progress? Does it give promise of maintaining its position of supremacy upon the educational forum?

In the past we have depended in large measure for our initiative upon the presidents of the Association. With simpler conditions they were able to meet the duties imposed. We can no longer hope that busy men, who are able to give but a small part of their time and energy to the great problems of this Association, can meet our present needs.

In view of the growing complexity of our national existence and because of the ever-enlarging number of independent organizations and because of the increasing burden of responsibility laid upon the schoolmaster, it does not seem possible that this Association can continue to exert so wide and

beneficent an influence and to maintain its position of leadership in the future, unless there be certain changes of policy and the adoption of additional plans for the administration of its affairs.

If these changes are to be effective, they must embody the principles of other modern organizations, chief among which is permanent and skilled management.

Further evidence of a need of a certain reorganization and redirection of the management of this Association is furnished in the fact that with the annual and desirable change of presidents, both of the Association and of the various departments, there is a lack of continuity and sequence of action. The necessity for change is further shown in the fact that no program or policy, however valuable, is likely to be continued beyond the tenure of the officer or officers initiating the same.

Because of these manifest needs and for other obvious reasons, I am constrained to offer the following plan of reorganization, with confidence that its application would add greatly to the present efficiency and to the future usefulness of this Association:

Let an advisory council, consisting of three persons, be provided, two of whom, selected by the directors or by the trustees, should serve for a term of years. The third member should be the President of the Association, *ex officio*. The appointed members should be eminent, constructive educators endowed with the true spirit of research. The salary should be commensurate with the importance and responsibility of the work and such as would enable them to give their entire time to the duties committed to their care.

While it must be admitted that our present income does not seemingly warrant large increases in expenditures, yet the services which would be rendered thru such a plan, the active and increased interest in the Association, and the consequent enlarged membership would fully justify the proposed additional expense.

Thru this official bureau much of the work now left to the mercies of independent organizations, many of which are inexpert and quite unable to promote school interests, would be satisfactorily and intelligently performed. Many more investigations of first importance could be conducted and the office would serve as a clearing-house and bureau of information to the officers and presidents of the various sections and to educators and the public in general.

It seems perfectly certain in this age of refined organization and highly skilled specialization that no institution or society can be successful that fails to employ twentieth-century business methods. The search today is for efficient management, for the taking-up of lost motion.

Not only would the advice and experience of the permanent members of this council be of the greatest service to the incoming President, but their policies, if wise and approved by the directors, would inevitably bring to the

Association a prestige and an authority that would make it what it ought to be—a court of last resort to which the public might come with confidence for wise and timely advice and for a clear expression of the best and latest thought on all educational themes.

In further evidence of present conditions and the possibilities of the proposed plan, let us consider the following:

There is a great and apparent need in this country for a better and closer organization for developing professional opinion among teachers and focusing their thought in ways best fitted to affect public opinion. We have county and city institutes, summer training schools, reading circles, section teachers' meetings within the various states, state teachers' associations, conventions of colleges and preparatory schools, and many other organizations, all of which are doing much good. Their work, however, fails of completion thru lack of correlation. Has not the time come for a careful consideration of some plan by which all of our state and local associations may be brought together into an effective relationship with the National Education Association, and could not this be accomplished most certainly thru the assistance of an advisory council?

In many communities and states the battles of teachers and associations for better conditions and laws are too frequently lost or made unnecessarily difficult because of the lack of such support as could be afforded thru the definite encouragement and approval of this Association. Often, too, the good work of one legislature is overthrown thru the ignorance or lack of information of a succeeding legislature. The authoritative approval of good measures by this body of educational leaders would help to win many a contest and would firmly establish many a worthy measure.

With the proper and necessary machinery, this Association could foster the organization in various parts of the country of certain educational councils made up of representative members of the profession, to whom the superintendents or communities may appeal in case they wish to have any careful consideration of educational problems. Any superintendent who is under criticism for what he is doing in his school system ought to have a group of his colleagues to whom he can refer his problems and from whom he can draw advice. In the same manner communities which are about to start school inquiries ought not to be left to the tender mercies of technically unskilled and untrained investigators.

The National Education Association could and should undertake systematically to foster certain lines of scientific investigation, an activity that would easily be more significant than reforms which can be undertaken in the schools.

Perhaps in no other field is the process of adjustment and scientific inquiry proceeding so satisfactorily as in the departments of education in our colleges and universities. Here not only the whole philosophy of institutional training is studied historically and pedagogically, but also the

individual in all his social relationships. It is here that much of our present research is conducted. Thru these departments and in collaboration with a corps of teachers representing the high schools, the problem of secondary education could be studied carefully, with reference both to the kind and character of the entering body and to the quality of its output.

Perhaps the greatest service of the National Education Association in the future will come by developing a more intimate relationship to the profession of education. In this way it would gradually come to embody the ideals, ethics, and aims of the profession. It would stimulate research, encourage forward movements, place its stamp of approval or disapproval on current happenings and trends, and it would do all these things with a somewhat more direct regard for the profession of education than it has in the past.

The volumes of *Proceedings* of the National Education Association are a rich mine of the history of American education and as such are invaluable; but they are huge volumes and are reference books rather than a source of present information. The National Education Association, thru its able advisory council, might well appeal to its members thru a periodical which would appear with enough frequency to make it the vehicle for current educational discussions and for current educational contributions. This periodical would in no sense undertake to occupy the field of the various state educational publications, but would be the official organ, which would be a constant reminder to the members of the Association of their duty to the profession and a medium for that type of information which can come only thru some periodical constantly coming to hand.

These are but a few of the many possibilities that conceivably would grow out of the plan for placing this Association upon a modern business basis.

Finally, if this organization is to continue to perform the high service to which it was dedicated and if it is to be in the future, as it has been in the past, a powerful instrument for educational good, there must be a more complete solidarity and unity of purpose among the teaching body of this country and a closer correlation with all the great forces at work for the world's betterment.

An army of more than five hundred thousand teachers united is an irresistible force to which all things are possible. Thus shall the words of Horace Mann become a true prophecy: "By a national organization of teachers, great and comprehensive plans may be devised, to whose standard each state may be gradually brought into conformity."

WHAT SHALL WE DO WITH THE SINGLE-ROOM SCHOOL?

M. P. SHAWKEY, STATE SUPERINTENDENT OF PUBLIC SCHOOLS, CHARLESTON, W.VA.

The prestige of the "little red schoolhouse" rests on something more substantial than mere sentiment. That *little* old school yet remains one of the *biggest* factors in our educational problem. Even numerically it is big. In the number of teachers employed it shows up a total of 212,000, as compared with an aggregate of 300,000 in all the consolidated, graded, village, and city schools of the nation. According to the notable monograph put out a few weeks ago by Dr. Monahan, of the United States Bureau of Education, the rural schools enroll something over half of all the pupils of the country, and of these 60 per cent, or 6,689,000, are to be found in the single-room schools. If territorial extent were to be considered, it would probably be found that four-fifths of the country knows no educational institution beyond the old-time one-room school. If, then, as many as two-fifths of all our people are educated by the single-room school, it *is* a *big* factor, and if its work is a failure, that fact should cause alarm. But is its work a failure? Yes, and no. Blair of Illinois was right when he declared that general accusations against the rural school are unfair. Quoting the same authority further:

> This is a big country, and the differences in climate, physical resources, and character of the people effect great differences in their social institutions. These differences perhaps are most marked in the schools of the different sections of the country. And amongst schools, the rural schools differ most. It is quite within the bounds of truth to say that the worst country school differs from the best in efficiency as much as the ancient reaping hook differs from the modern self-binder. These differences are both spiritual and material. Some are superficial and easily seen by the inexperienced eye; others are deep seated and are revealed only to the trained eye upon close study. Yet we hear from high places such statements as "the country school is the tragic phase of education," "the laggard in public education," "a failure," "a disgrace."
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> Now, there may be whole states where some or all of these terms truly describe the one-room country schools, and even in the most favored states these terms may apply to certain schools and sometimes to whole counties. But in all our discussions of these one-room schools, we must ever keep in mind that they differ in quality and usefulness so greatly that no single generalization will describe them as a class.

The whole truth in the case is bad enough, however. My only thought here was to venture a few words in appreciation of the work of those heroic souls in the little school who have caught the inspiration of their opportunity, and rendered the service which only the great-hearted know how to render. My regret is not only that so few teachers have done this thing, but that conditions in the country generally are not conducive to that kind of service. Perhaps indeed the really efficient country school is in the minority.

Admitting, then, that a majority, or even a formidable minority of the single-room schools are failing, such a school becomes a problem for

serious consideration. What we shall do with it is a question that it would be presumptuous for me to attempt to answer, were it not for the fact that the collective experience of the various states has demonstrated at least a few of the fundamental principles involved in the case. I would say:

1. Abolish it, by the process of substitution. There are a great many of these schools that can offer no better reason for their existence than that of the small boy who ran into his mother's French plate mirror and smashed it, giving as his reason that he got a-going and couldn't stop. In every state in the Union there are still more or less of these isolated little schools that have got a-going and can't stop. They should be brought together at some central point and made a part of a larger and better school there.

Some enthusiasts go so far as to prescribe consolidation as the one great cure for all cases. But like Christian Science and the man with the broken leg, there are instances where the remedy doesn't apply. I need not take time to point out such cases. They are easily recognized; and because of the mountains, soil, and climate in many sections, they are probably permanent fixtures in our educational system, and that in no inconsiderable numbers.

What then shall we do with the single-room school, if consolidation will not solve the problem? I would answer:

2. Reinforce it with *competent supervision.* In all respects the coldest, dreariest, most desolate and hopeless picture in our whole educational scheme is that of a remote single-room country school, an unattractive box on a knotty half-acre, alongside of a muddy road, poorly heated, fearfully ventilated, supplied with rough furniture, without a library, pictures, paint, or other decorations. To make the picture complete, imagine as the arbiter of the destinies of this situation a young girl teacher, inexperienced, untrained, and perhaps snatched from a town or city environment to teach the six months' term of school and then be gone. What are we going to do with a situation like that? Get rid of it by all means as soon as possible, but there are a great many instances where it does not seem possible to get rid of such conditions at present.

In nearly all such cases, however, it *is* possible to supply helpful local supervision. Such supervision is being provided in Washington, West Virginia, some of the New England states, and some of the southern states. Barring consolidation, it is perhaps the greatest step toward the redemption of the rural schools that has been made in a quarter-century.

In the city we provide a supervisor for every nineteen teachers, the great majority of whom are not only professionally trained but experienced. But in the country with its doubly difficult task we throw the young teacher, without training or experience, overboard, and say, "sink or swim." Little wonder that in so many cases it proves to be a "sink."

It is amid conditions such as these that the rural supervisor renders

his greatest service. He is a friend and counselor. He adds to the success of the strong teacher, and saves the weak one from certain failure. He may get the teachers of his district together for a conference every week, thus enriching their social life as well as refreshing their enthusiasm and giving some help in matters and methods. He can easily obviate many of the blunders of the young teacher groping her way along without the advantage of professional training. He can also exercise a restraining influence upon such teachers as are thoughtless or rash and likely to bring trouble upon themselves and dissensions into their work. He can back up and reinforce substantially the good work of every teacher in his district. The district supervisor improves the teaching, the discipline, the attendance, the spirit, and the ideals of the school.

In one of the states where this plan of close rural supervision was put into operation five years ago, it has been found that the percentage of attendance in all the schools thus supervised increased in three years from an average of 69 per cent to a general average of 86 per cent, a gain of almost 25 per cent in that short period.

A two-teacher school has double the opportunity for efficiency that the one-teacher school has, and the one-teacher school supplied with competent supervision close at hand is in effect a two-teacher school, and supervision is possible in many cases where the larger school is an impossibility. Some who have made a study of the plan of rural supervision which I am describing claim that it will increase the working efficiency of the single-room school from 25 to 40 per cent. That estimate is perhaps well within the bounds of conservatism.

3. I have a third remedy to propose for cases where neither of the other two will solve the problem. *I would change its sex.* We should change the sex of the one-room school, not because men are the better teachers—they are not—but for the very substantial reason that the man *may* stick to his job, but the woman teacher will not. The difference is that when the man teacher marries he not only continues teaching, but he goes into it with increased earnestness, but when the girl marries she throws her profession into the fire, and never thinks of it again. Therefore, if the one-room school is to become a thing of permanency and power in the community, it will call for a man teacher in the majority of cases.

If the community will then go one step farther and provide a home for that teacher, a neat, cozy house with garden and orchard, near the schoolhouse, so that the teacher may not only keep the school plant alive during the entire year, but rear his family under decent conditions, that school will make itself felt in the community.

If the country is a laggard in schools and social conditions, is it not because the country has not had a fair chance? The products of the farm are collected in the towns where the accumulated treasure of wheat,

corn, cotton, and cattle is taxed to support the city school. The railroad drains the country and concentrates its rolling stock, warehouses, terminal facilities, stocks, and bonds in the cities, where they are taxed to support the city schools. The city banks collect the surplus money from the country and turn it over to finance large business concerns, which in turn pay their taxes to support the schools of the city. Mine and forest pay a like tribute, and the greatest of all natural resources, the brain of man, is turned into productive activity to pile up the wealth of the city.

For a minute note the contrast in conditions. In the United States, only one-fourth of the people live in the cities, but that one-fourth spends one-half of the nation's entire school money. In other words, the nation spends three times as much on the education of the city boy as on that of the country boy. Is that a square deal? Is it sound political economy? The city has most of the high schools, and nearly all of the libraries, museums, and laboratories. The one-fourth of the people who live in the cities own three-fourths of all the public-school property of this country. The cities pay their teachers double the rate of salary for a 30 per cent longer term. The cities also gobble up most of the available supply of professionally trained teachers. Money has enabled the cities to do these things, and to my mind we may talk about the fresh air of the country, we may "readjust the course of study," we may "fit the country school to the country needs," and do all these other good things, but until the country gets more money it will not grow fat very rapidly. Country homes must have more comforts, and country teachers must be paid better salaries.

The situation at present is not without encouragement. As a people we are getting rid of some of our local selfishness. We are learning the value of co-operation. Our cities are learning that they can't go on prospering indefinitely without prosperity in the country. We must carry that idea further. As a matter of self-defense, if for no more worthy reason, the cities must abandon the selfish policies which they have pursued, and join hands with the country for a mutual prosperity whose Americanism shall be broad enough to reach every child, whether rich or poor, black or white, in the city or in the country.

MORAL VALUES IN PUPIL SELF-GOVERNMENT

HENRY NEUMANN, LEADER, BROOKLYN SOCIETY FOR ETHICAL CULTURE, BROOKLYN, N.Y.

We have been taught by experience to fight shy of educational cure-alls. The human problems which teachers must meet are so complex, the resultant of so many and such varied forces, that we are inclined to shut our ears the moment some widely advertised device is made petitioner for our consideration. Let me assure you then that I do not begin with the assumption that the method named in the title of these remarks is our country's sole

hope. Much more than pupil self-government alone is needed for the moral equipment of our future citizens. Yet, when all is said, the fact that one agency for improvement does not exhaust our resources ought surely not blind us to the invaluable good which it may indeed accomplish.

Among the reconstructions awaiting our national life, it needs no profound insight to reckon grave changes in the sphere of government. The scope of public administration is steadily widening. The details of commerce and industry, for example, are coming increasingly to be matters of political concern. Tariff questions, rates for telephones and other public services, questions of workingmen's compensation for accident, all these are signs of the close connection between government and business; and unless we are far in error, the tasks intrusted to public administration are certain to increase in number, delicacy, and importance.

Add to this widening of governmental functions, the fact that new classes are coming into political power. It is only a question of time when the example of these western states will be followed from coast to coast and all the women of America will participate directly in citizenship. Our working classes too are astir. The years ahead of us are sure to see their political strength and their consciousness of that strength increase.

This then is the situation which we are to face—new and ever graver problems for the public to solve, new classes conscious of political power. Our civic tasks are already sufficiently complicated. The crooked and the incompetent office-holder, the ubiquitous boss, the masses of ignorant voters at one end of the line, and cliques of highly respectable moneyed interests buying legislation at the other, are even now straining our political fiber perilously. What will the future behold when the severe tug of these new ventures is added? Of this we may be sure: the stupendous task of guiding the community life will call for citizenship more intelligent and alert, more conscientious, than it has ever been.

I repeat that we must not expect pupil self-government alone to make every citizen competent. But all the more reason, since the task is so very huge, for utilizing every resource at our command. Among these instruments, not the least valuable is the one for which I am pleading this afternoon—allowing pupils to assist in the working of their school thru officers and committees of their own election, thru laws, penalties, rewards, and other efforts of their own making.

What gives such experiences their moral value? It is not that by electing their own mayors and governors they learn something of the machinery of popular sovereignty. They will acquire this fast enough when the state permits them to vote. A single week of intimate association with a ward politician will give them more insight into the actual workings of our government than the school can teach them in years. Nor is it the more or less artificial imitation of grown-ups that prepares them for the real duties of

later life. It is rather that by genuine willing help in the running of their own young community they learn the meaning of membership in a democracy. During the years when they are most open to the suggestion of certain fundamental moral requirements of group life, they get the chance to learn these by first-hand experience.

Of these demands the most obvious is respect for law. I think that we often fail to realize what an arbitrary imposition school law means to most children. The law of the school becomes less of this alien imposition, however, when he enjoys a genuine chance as a school citizen to help frame the regulations which intimately concern him. He responds readily enough to his own orders even when for the time being he must suffer a loss.

As a rule, boys cherish little resentment against the pupil community (this is less true of the girls) when their own officials are the ones to punish offenses. The general opinion among the boys is that the fellows learn to take their medicine. In answer to the question, "Suppose that your school were to vote on the proposition to abolish the school-state and go back to the old order, do you think that boys who have been punished will bear a grudge and vote in favor of the plan?" the reply of one of the lads is significant: "No. Everybody knows that you get a squarer deal from the boys than from the teachers. Sometimes a teacher blames a fellow without stopping to find out if he really did it." Well may we blush when our pupils teach justice better than we!

The most significant value is the opportunity to meet what is perhaps the deepest demand of democracy—active, willing participation in the responsibilities of one's group. The school is a community with the problems of a community. It has certain functions to perform in its corporate capacity. It must mold character, it must teach, it must safeguard the health of its members, it must protect them against injury from the indifferent and the vicious, it must bring the weakest up to normal standards, it must encourage all to reach new and higher levels. These are the tasks of a community; and they mean most for the moral development of all concerned when not the principal and teachers alone, but when every boy and girl old enough to understand the fact realizes that the school actually is such a community and that to attain its ends, it needs his ready co-operation. Two convictions on the part of the children are essential—first that there is a common aim uniting each to his fellows and to the adult authorities, and second, that in the furtherance of this aim each has a part to bear in the common responsibility. Wherever systems of pupil co-operation have been tried long and patiently enough, the testimony has accrued that they offer decided help to this end.

It is not only in matters of school routine that pupils can learn to participate in the obligations of their community. Especially in the high school their efforts can be guided to making positive contributions to the

larger life of which their school is in turn a part. I know an energetic superintendent in a small western city who has interested the collective energy of his pupils in helping their town in a number of important ways. In the course of school discussions upon their city's needs, they came to the conclusion that there were many ventures which the town should undertake. Their next step was to interest their parents and to hold a series of public meetings in the school, conducted by themselves and addressed by experts. Among other results they procured these wise measures: improvement of the city's streets and sidewalks, the starting of a municipal playground, the inauguration of a system of garbage collection, the employment of a municipal nurse, the beginning of a park system, the establishment of a public bathing beach, and the erection of bathhouses.

When civic interests such as these are trained, who can doubt the wisdom of striving for them? Here is pupil effort at its best, for here is no question of restraining petty offenders, no fear of obvious punishment to compel good behavior, but the spirit most needed to remake our communities—ready co-operative endeavor after positive creations for the common good. These are uncompelled expressions, born of genuine interest in community progress. Try to picture what America would be if every adult were so moved.

Such are among the moral values of this educational method. It is worth the labor it costs for the opportunity it gives to drive home the lesson of participation in group responsibility. Its effectiveness is due to the fact that it permits the working-out of moral experiences instead of mere listening to discourses about them. There is all the difference in the world between "knowing" what is meant by sharing the obligations of your group and "realizing" them by practice. Whatever moral instruction on the subject of responsibility is imparted by the teacher becomes more meaningful since it interprets actual experience. When, for example, pupils discuss with their teachers the ethical issues involved in their elections, in the duties of officers, committees, and citizens, in the disciplining of offenders, in the creation of public opinion, in reconciling such conflicting loyalties as friendship for a delinquent and duty to the school—in short, in the multitude of concrete moral situations that constantly arise—they are getting an ethical instruction which strikes home because it clarifies experiences in which they are sincerely interested. A lesson on the care of trust funds means something real to a class whose committee has borrowed for its own use money appropriated for a class purpose.

It is for such reasons as these that the self-government committee,[1] as whose representative I speak, is concerned to enlist the interest of teachers. The particular form that self-government assumes, whether it be named

[1] Self-Government Committee, 2 Wall Street, New York: Richard Welling, chairman; Lyman Beecher Stowe, secretary; Charles S. Fairchild, treasurer. The committee publishes a series of free pamphlets on the subject. It also employs an expert whose services may be procured for the asking by any school that wishes to introduce self-government.

republic, state, city, or anything else, is entirely secondary to the principle of active participation.

In many schools it happens that the teaching staff as a whole is not especially interested. May not one reason be that teachers themselves are not given sufficient chance for self-government? They are members of their community with gifts to contribute to the whole; but too commonly they are treated as if they had no other function than blind obedience to the orders of higher officials. They have little voice in shaping the curriculum or fashioning the other policies of the school system. The weekly conference gives an opportunity for every member of the faculty to contribute his share to the solution of the common problems; but is it always so considered? How frequent it is for so-called conferences to be only an assemblage of mute drillmasters summoned by the chief drillmaster just to listen to his orders! Can we expect teachers to appreciate what democratic living would mean for their pupils when they themselves are not permitted so to live? Can the spark of enthusiasm be kindled by those in whom it is dead?

We shall never attack the root-problems of character-building until the teaching force as a whole is aglow. America spells opportunity, we are fond of saying. Its grandest opportunity is to liberate character— democratic character, that is, in both its immense staff of teachers and its millions of boys and girls. No graver responsibility has ever rested upon a people than the task of our beloved country to show that ethically democracy is not an idle dream. To help equip all our sons and daughters in howsoever slight a degree to bear their share in that responsibility is worth every bit of effort that it takes.

THE PERSONAL ELEMENT IN OUR EDUCATIONAL PROBLEMS

WILLIAM H. CAMPBELL, PRINCIPAL, D. S. WENTWORTH SCHOOL, CHICAGO, ILL.

"The man behind the gun" became a popular phrase during recent military experience. It suggests that the personality of the soldier is more to be reckoned with than weapon, drill, or defensive armor. It is an epigrammatic statement of the law, as old as the human race, that man was made to dominate the material forces by which he is surrounded.

Everyone who is worth while feels this force of dominance struggling within him striving to reach a realization. It is the instinctive hunger of the soul that has created its idea of a deity and can never be satisfied until it has itself attained the stature of that ideal. There can never be rest in the world, for as the individual rises to a higher plane, his ideals rise to greater heights, luring him to more strenuous endeavor. It is this unsatisfied hunger of the soul that keeps the world constantly advancing.

We are often blinded and confused by the astonishing material accessories that gather about a great institution. The casual observer sees only

these things, the framework, the grossly tangible objects of sense. But to him who reflects, these tangible evidences pass from thought and there settles upon him a consciousness of a work created by the power and genius of a human soul; a visible presence and manifestation of the dominating force of man.

Observe this great arched roof, one of the most daring pieces of architecture ever attempted! Made, fitted, and erected without the use of nails; stretched over this vast amphitheater which can accommodate ten thousand people; a creation in wood in a land almost barren of trees; a product of genius equalled in the building, by men out of the ranks, of this magnificent organ, which for a generation has challenged comparison with the finest product of our best equipped factories! Back of it all was the native power and personal force of that massive character and constructive genius that could venture the transplanting of a whole civilization from the banks of the Mississippi to these desert wastes, leading one of the most unique and tragic migrations recorded in all history.

In the midst of the busy life of Paris stands the Hôtel des Invalides, one of the most striking mausoleums ever erected to perpetuate the memory of man. In a splendid casket, surrounded by the memorials of his battles, rest the remains of the little Corsican soldier. European sovereigns overturned his throne and attempted to stay the tempest he had ridden; but in vain. The map of Europe has been remade. The consciousness of personal value and the demand for political recognition have permeated all classes, and there remain only the relics of monarchy, while constitutional government is as much the pride of European peasants as of American farmers.

At the capital of my own state, sealed in cement and surmounted by a noble monument, rest the bones of our martyred president, Abraham Lincoln. What board of qualifications would have passed him on from the poor lawyer's office to the White House? Tested by scholarship, he was an ignoramus; tested by social codes, he was a pariah; tested by the rules of statesmanship, he was absolutely untried and apparently limited. But he believed in himself; he had faith in his vision of potential outcomes; he had a grasp of fundamental relations and the personal force to carry his views to fruition.

Before such men as these, how petty the mechanical barriers we erect about our sacred places! How insignificant the throng we pass on bearing the tags of our coveted examinations! These men stand out in the great panorama of events like the tall peaks of yon serrated mountain ranges. They rise above all compeers, looking down upon all beneath the skies; about them are hundreds and thousands of others who have not attained their greatness but by the same forceful characteristics have broken from the level of the plain and have risen to eminence and leadership.

I am pleading for the recognition of inherent power and for a system that

will encourage and develop it—for a broad and generous recognition of personal qualities that come by virtue of blood and peculiar environment.

In a few large city school systems the practice still obtains of selecting supervisors, and, so far as possible, teachers, by having their work and personal qualities observed in the fields where they are engaged, and, if a favorable report is made, asking them to apply for admission to the city system. This is a recognition of the personal element, a basing of future possibilities upon definite present results. But in most of these great systems the policy is followed of seating the candidates who may desire admission at desks in numerical order, giving them numerical names, and turning their numerically numbered papers over to unknown markers who place certain percentages over against them. The number set opposite the highest percentage with the oldest date becomes the first initiate to the system. A course more ridiculous and unjust to the children and the homes of our great cities could hardly be imagined. "How many eligibles for principalships [those holding certificates] have you on your list?" was asked of a superintendent in one of our large cities. "About 140," he replied. "How many of these are desirable material for appointment?" "Oh, some ten or twelve," he replied. Yet in that same system the list is being ground out on the plan of first come first served in the order of dates and percentages and the endless succession shows no improvement. Think of a great business establishment spending millions of dollars upon its salary schedules selecting its supervisors and foremen upon such a plan!

In the endeavor to secure an adequate mental equipment and discipline upon the part of the teacher, raising the profession above the biting ridicule that has followed it from the days of Socrates, we have swung far toward the extreme of regarding the sole necessary equipment certain academic knowledge, or its equivalent, a diploma. Far be it from us to decry the demand for academic culture or for evidences of scholarly discipline. Paraphrasing the words of the great teacher, these should we demand, not neglecting the weightier matters of personal character, force, and ability to impress. We are lifting one side of the teaching profession out of the range of ridicule, but it is toppling over on the other side and we are met upon every hand by the charges impractical, pedantic, and bookish. Too many of the teachers in our schools are but college and university diplomas on legs, stripped of all human attributes and sympathies, holding the terrors of the written law over the heads of their helpless victims. They need to be supplied with flesh that can bleed, and nerves that can thrill, and emotions that will enable them to feel joy and sorrow in the common affairs which make up so large a part of the pupils' lives.

The personal element and activities should not be limited to the merely pedagogic side of educational movements. Every teacher should be thoroly alive to the ever-changing conditions that are going on about him. We have been tempted to shut ourselves up, after the manner of hermit crabs,

within our thin pedagogic shells, trusting that the winds and waves would be propitious, wafting us to abundant food and pleasant surroundings. The great world is going on without bothering very much about us. In the town from which I come there are probably a hundred department managers and assistants, to say nothing of the larger business agents, who receive from $10,000 to $50,000 per year for their services. But when the superintendent of schools was given $10,000 we listened to the tale with bated breath and the story was told all over the country as a marvelous act of appreciation or generosity or extravagance, as the case might be.

But this is not all. Indeed it is the least of our evils. If the government, the state, or the community decides upon the desirability of a material improvement, be it canal, or railroad, or subway, the cost is a secondary consideration. We carry on war, buy islands, build battleships, or enter upon vast internal improvements without counting or complaining of the cost. But we sit down before an educational problem, such as establishing a national bureau of education, adequately providing for judicious classification in our schoolrooms, making provision for the various types of our cosmopolitan population, caring for the delinquents and truants, housing the rural schools in central buildings where the child of the farmer may have advantages equal to those of his city cousin, and throw up our hands in despair because it adds to the cost and increases taxation.

The most perplexing problem before us at the present time, affecting both the city and the rural school, is that of vocational training. Its solution would not be so difficult were it not for the financial outlay involved. We are trying to figure out how this may be added and something else subtracted so that no more money need be taken from the public purse. The state and the nation deal with no other subject in this way. It is time for an educational propaganda that shall echo and re-echo the needs for these improvements and innovations, regardless of cost, until the whole people are alive to the situation and the schools are brought up to the advance lines of our twentieth-century standards. The vocational question is undoubtedly revolutionary in its aspect but not more revolutionary than have been the innovations in business and in political and social affairs during the past few years.

A corollary naturally grows out of the discussion I have attempted to lead which is more important to us than any statements I may have made. If it be true that the personal quality, the self of manhood or womanhood, stands over and above all material constructions and institutions; if the individual character and forcefulness of expression are of paramount importance in the world; then all things educational should be turned to the development of this personality. It is high time to question the wisdom and economy of classifying our children by herds and grades. A herd of men never constituted anything but a machine. It is only when individuals have broken loose from the formal herd, refusing to be confined by regula-

tions made for large groups, and have found means for individual development that we have had outbursts of genius.

The child is not a piece of inert material that can be corded up and estimated at so much per unit of measurement. He is the essential element in all processes, and one piece can never be substituted for another without affecting the character of the output. It is this individuality of the child, the strong personal characteristics, that the schools should foster. There is danger in these days of gigantic trusts and aggregations of forces that the individual shall be submerged by the group spirit and that men shall lose themselves in the great flux of associated interests. The schools are the one force that can stand like guardian spirits over these embryonic men and women, clearing the way and giving opportunity for the coming into life and activity of those forces and personal qualities that have ever been the uplifting and inspiring elements in our civilization.

Every school officer, every supervisor, every teacher that comes into the presence of the children in these schools should hear that voice from Sinai, "Take thy shoes from off thy feet for the place whereon thou standest is holy ground"; not because he is in the presence of the raw material out of which factory and shop operatives are to be made; not because the voters and office-holders and legislators shall come thence and go to their places like cattle to the shambles; not because from them shall come the multitude that shall fill our colleges and universities and medical schools and law schools and theological seminaries, but because in them is the germ of life eternal for the nation.

THE HIGH-SCHOOL PERIOD AS A TESTING-TIME

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Heretofore education has been conceived almost entirely in terms of training, and the schools were content to offer only one kind of training. This kind was devised for the education of men in the learned professions, and afterward was proclaimed to afford the best kind of intellectual discipline and consequently the best training for everyone. When, however, this discipline theory was questioned and abandoned, the way was opened for the next step, vocational training, which means specialized training, training for industries, for commerce, and for agriculture, as well as for the professions.

The work of the schools is not completed, however, simply by offering many kinds of training. The school must assist the pupil to discover which kind will meet his needs. The school must assist in the whole process of adjusting the pupil to life. Whatever else education may consist of, it seems to me that these three phases are essential: namely, first, a conception of the variety and significance of the world's work;

second, the discovery of aptitudes, largely thru the process of testing aptitudes; and third, training. The adjustment of the individual to life is broader than the adjustment to vocation. It includes also the selection of avocation, the enlargement of interests, and the preparation for citizenship. For all these ends a broad knowledge of the world's work and the discovery of personal aptitudes are necessary. Our conception of education must therefore be broadened so as to include testing as well as training, and the schools must be reorganized so as to afford an opportunity for each individual to test his aptitudes in as wide a variety of work as possible. For some the period of testing must be short, for others it may be longer, but for all it is highly important.

It is my purpose to sketch very briefly certain methods whereby the high-school period may be made a testing-time, and to indicate how this conception of secondary education calls for cosmopolitan, or composite, high schools and for broader college-entrance requirements.

Mr. Jesse B. Davis, principal of the Central High School, Grand Rapids, Mich., has devised a notable plan for vocational and moral guidance thru English composition. Under the direction of the teachers of English the thoughtful attention of all pupils of the high school is directed each year toward some phase of adjustment to life's duties.

This plan worked out by Mr. Davis commends itself for many reasons. It reaches all pupils in the high school and encourages a thoughtful attitude toward life's problems thruout the entire high-school course. It adds to the interest in a subject already in the school. It brings the teachers normally into the relationship of guide and counselor to pupils.

To give the widest possible knowledge of the vocations themselves and of the kind of aptitudes needed, a number of high schools are conducting a survey of vocations. In one year the pupils gather all the information they can about a large number of vocations. Mr. William A. Wheatley, superintendent of schools in Middletown, Conn., has for a number of years conducted such a course. About fifty vocations are studied by each class. He reports that the pupils are interested in the study, that it appears to be of value in helping them choose a vocation, and that it convinces many that it is worth while to secure adequate training for life's duties. The great difficulty in this work consists in securing reliable information. So much of the literature available consists of the opinion of some one man, generally an enthusiast regarding his own vocation. However, those who are inclined to be overcautious should remember that the light which the school can give is pretty sure to be clearer than that which otherwise would be obtained by the pupil from chance acquaintances and miscellaneous reading. Valuable information is now being gathered by such agencies as the Vocation Bureau of Boston under the direction of Mr. Meyer Bloomfield, and by the High School Teachers Association of New York City.

Every subject in the high school should be utilized to a certain extent to aid in the testing process, either by enlarging the vision of the world's work or by testing aptitudes. In the newer textbooks in natural science attention is given to the industries in which scientific processes are used. When the social sciences—history, civics, and economics—are better adapted to the needs of high-school pupils, they will teach more about the history of industries, the social significance of commerce, and the newer vocations connected with public utilities and social service.

The testing process should not be confined to the schoolroom. At its best the schoolroom has an artificiality which prevents it from revealing certain aptitudes. Activities such as the following when conducted by the pupils themselves under the guidance of teachers are of much value in this process:

Debating societies, especially when organized as city council, state legislature, or congress, test powers of leadership. It is important, however, that such societies shall be under the guidance of teachers who have a clear conception of new ideals in democracy so that the aptitudes revealed shall be those of the true leader rather than those of the politician.

The school paper affords an opportunity for testing aptitudes for journalism. It should be borne in mind, however, that we are not interested in fostering yellow journalism, but instead in discovering the qualities that have made certain journals powerful in forming sound public opinion.

The dramatic society reveals aptitudes that may find expression in the pulpit quite as likely as on the stage.

The management of the baseball team often exhibits managerial ability never once called into play in the classroom.

Pupils upon entering the high school may be divided into two groups, those who have not decided upon their future education or their future vocation, and those who have. For those who have not decided, there is needed a general course which will provide a broad outlook upon the world's work and afford an opportunity to test aptitudes in a variety of lines. Professor Hanus in the report of the Committee on School Inquiry, New York City, recommends that such a general course be provided. It is my impression that very few high schools have as yet satisfactorily devised such a course, partly because they have been handicapped by the tradition that regards training as the sole aim of education, and more especially by college-entrance requirements. It is evident that testing should be the controlling factor in the general course, and that when pupils discover aptitudes and develop motives that make continued education desirable, no arbitrary barriers should be placed in their way.

For those, who upon entering high school have decided upon their future education or their future vocation, specialized courses are offered in which the idea of training is emphasized. The traditional college-preparatory course is one of these specialized courses.

The idea of testing should not, however, be absent from specialized courses. It is worth while to ask: "Should these early choices be regarded as final or as provisional?" When we remember that these choices have been made by pupils of about fourteen years of age, it is evident that their knowledge of their own aptitudes is necessarily very limited, as they have had opportunity to test their powers in only a few lines and even in these lines only in an elementary way. These children of fourteen have very little conception of the real significance of various vocations and their own personal ideals have had little opportunity to unfold. If these early choices are regarded as final by parents, teachers, and school authorities, and courses narrowly organized, there is comparatively little likelihood that the pupil will revise his choice. If, however, these early choices are regarded as provisional by parents, teachers, and school authorities, and some study is made of the world's work, the number of pupils who discover some course better suited to their needs will undoubtedly increase.

The notion prevails in some quarters that a transfer from one specialized course to another is undesirable even when the pupil is actuated by a seriousness of purpose. It is argued that the work already done becomes of little value and therefore represents sheer waste. This argument has foundation when specialized courses are narrowly organized, when technic is overemphasized, and when no effort is made to give the pupil an understanding of underlying principles and appreciation of the social significance of the work. If, on the other hand, the course is broadly organized to include both technic and appreciation of some large and worthy field of human endeavor, then the value of this work is permanent even to the pupil who transfers to another course.

The distinction between the general course in which testing is emphasized and the specialized courses in which training is emphasized will doubtless raise the question whether the instruction for these two groups must be conducted entirely in separate classes. Evidently the small high school with five or six teachers would find this absolutely impossible. Nor indeed does it seem to be necessary that separate classes should be maintained in a large number of subjects. The work in English, history, civics, and economics rarely calls for such distinctions. Furthermore, it is possible to organize certain introductory courses in practical arts so as to be of value to both groups. The Massachusetts Board of Education, in a bulletin recently issued, recommends that schools offer as electives a course in introductory agriculture and a course in introductory business. The purpose of the course in introductory agriculture is stated as follows:

> To give the boys and girls an appreciation of the interrelations of agriculture and science, to develop a love of country life, and to reveal the opportunities now afforded in farming and in related occupations and professions.

Regarding introductory business the bulletin states:

This course is intended to enable the pupil to discover whether he has aptitudes for clerical work or for business, and at the same time to furnish such knowledge of business practice as will be of general value. This work must afford a real test of ability in this particular field.

The conception of the high-school period as a testing-time calls for high schools of the cosmopolitan, or composite, type, that is, schools that offer the widest possible variety of instruction. For pupils in the general course the need of a wide variety of work to test aptitudes is evident. As the pupil progresses in the general course he may begin to specialize and the school should at every step aid him in a wise choice of work. For pupils in specialized courses, intimate association with pupils in other specialized courses is highly desirable, as these early choices should be regarded as provisional. The cosmopolitan school assists teachers in understanding all types of secondary education, thus making them better counselors of youth. It does not seem necessary to me that a large cosmopolitan school should conduct all its activities in a single building. When separate buildings prove desirable as contributing to efficient management and definiteness of aim, these buildings may be located near together and placed under one supervising principal. The school is then one institution and the pupil is not called upon to sacrifice school loyalty in order to secure a transfer from one specialized course to another. A high-school system that consists entirely of separate specialized schools, such as technical, commercial, and college-preparatory schools, totally ignores the needs of pupils who, at fourteen years of age, are unprepared to choose a specialized course and it gives an unwarranted finality to early choices.

The conception of the high-school period as a testing-time calls for the abandonment of traditional college-entrance requirements. These requirements are based upon the conception that the only function of the high school is training. Under these requirements the pupil must decide upon entering the high school whether he will prepare for college or not. If he takes the college-preparatory course, he has no opportunity to test aptitudes except in a very few lines and is likely to come up to college with a very vague conception of his aptitudes. As Abraham Flexner says in his book, *The American College:*

> The motive on which the college vainly relies, self-realization, has got to be rendered operative at the earlier stage. . . . . As a matter of fact, the secondary period is far more favorable than the college to the free exploration of the boy.

In a recent study of the entrance requirements of 203 colleges of liberal arts that I made for the United States Bureau of Education, I found that for admission to the A.B. course four colleges give no credit whatever for natural science. One of these colleges in its catalog for 1911 has this significant statement: "Students deciding to enter Hamilton College should waste no time on subjects outside our entrance requirements."

According to this statement any study in the high school regarding the laws of nature and the attempts by man to utilize natural forces is a waste of time for a boy who is to enter the A.B. course in Hamilton College.

Discrimination against history is less common, and yet Princeton University, in a new plan announced only last year, devised a special system of points in order to discourage the study of history by those who are to enter Princeton. According to this plan, 15 units are accepted if the applicant offers a certain combination in which history is omitted. If, however, he offers one unit of history, $15\frac{1}{2}$ units are required and if he is so unwise as to study two units of history in the high school, 16 units are required.

Of twenty colleges for women, only three give any credits for household arts.

In a recent article in the *Outlook* on "The High School and the College," Theodore Roosevelt cites the case of a girl in the William Penn High School of Philadelphia, who has maintained a record of "A" thruout her high-school course and is president of the Student-Government Association in that school of two thousand girls. While in high school, she has become interested in social work and desires to go to college. She cannot afford, however, to go away from home and the college in her own city requires two foreign languages. She has had but one foreign language and consequently is shut out. Her case is not unique. Similar cases occur by the hundreds and thousands. It is useless to contend that she should have taken the college-preparatory course, for that course with its rigidly prescribed subjects would have offered little opportunity for self-discovery.

Fortunately a new articulation seems to be coming. At least eighteen colleges of liberal arts allow a substantial margin of four or more units for any subjects whatever that an approved high school counts toward graduation.

One of the most interesting plans of college admission is the plan of Reed College, Portland, Ore. This college is not concerned with the subjects which the pupil may or may not have pursued provided only that the work has been well taught and thoroly mastered. This college rejects many applicants who could pass the traditional college-entrance requirements. It admits many applicants that other colleges would reject. An important feature in the entrance requirements of Reed College is the requirement that the applicant state why he wants to go to college and why he selects Reed College. Thus Reed College has recognized the principle that the high-school period ought to be a testing-time in which the pupil shall formulate some kind of a purpose.

In conclusion, therefore, the enlargement of the idea of education to include testing as an important factor demands a high-school course which affords a broad survey of the world's work and the opportunity to test

aptitudes in many lines. It also demands cosmopolitan high schools and broader college-entrance requirements.

Much of the charm of youth, like the charm of the frontier, lies in the sense of potentiality, undiscovered possibilities, latent aptitudes. Every institution that would do justice to youth must not content itself with the training of powers already revealed but must maintain the expectant attitude. Passive expectancy is not sufficient. Every teacher of youth must be an explorer, and exploration calls for alertness, vision, and imagination.

TEACHING AND TESTING THE TEACHING OF ESSENTIALS

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"Minimum Essentials" is the topic most discussed in the educational world today. "Efficiency" is the slogan of the world of business and of achievement. Both have arisen out of the desire to avoid waste, to make every motion, every minute, and every bit of material count. The movement seems so reasonable and so necessary that we are likely, unless we stop to consider carefully, to impose it upon phases of activity to which it cannot possibly be applied. In purely mechanical processes waste in any form is undesirable and should, as far as possible, be eliminated. In growth, in life-processes, in the development of human personality, there must, however, always be more or less of what seems to us waste. Nature is always wasteful. Her methods are not direct and simple, but round about and complex.

In a recent article in the *Atlantic Monthly*, John Burroughs says:

> Man plans and builds and plants by method, order, system; he has eyes to see and hands to guide and wit to devise; nature builds and plants blindly, haphazard, all around the circle; her handmaidens are industrious but undirected. . . . .
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> The sun itself is a type of nature's wholesale spendthrift method. It radiates its light and heat in every possible direction and if we regard its function as the source of light and heat to the worlds revolving around it, what an incalculable waste goes on forever and ever. The account of this life-giving solar radiance that falls on the planets is a fraction so small that it is like a grain of sand compared to the sea-shore. . . . .
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> Yet thru this hit-and-miss method of nature, things have come to what they are; life has come to what we behold it; the trees and the plants are in their places; the animals are adjusted to their environments; the seeds are sown, fruits ripen, the rains come, the weather system is established, and the vast and complex machinery of the life of the globe runs more or less smoothly; non-directed, in the human sense. Blind, groping, experimenting, regardless of waste, regardless of pain, regardless of failure, circuitous, fortuitous, ambiguous, traversing the desert and the wilderness without chart or compass, beset by geologic, biologic, and cosmic catastrophes and delays, yet the great procession of the life of the globe, with man at its head, has arrived and entered into full possession of the inheritance prepared for it.

The school concerns itself with both kinds of work, that which is, or should be, purely mechanical, and that which is not or should not be in any sense or degree mechanical but which stimulates and nourishes life-processes.

The multiplication table, for example, should be learned mechanically. Machines are made to multiply. The more machine-like a pupil in his multiplication, the better he has been taught. The same is true of spelling, penmanship, correct usage, reading, as far as it consists of recognizing words, and certain forms of drawing and manual training.

But the school has another duty: to build character, to stimulate and foster growth in life. Such growth is never mechanical and must always involve what seems like waste. The stimulation and direction and nourishing of the growth of the higher powers of the individual, his reason, and his emotion, must always be the most important duty of the school, even of the elementary school. Knowledge of the world today, of how people live and work and govern, and of what is going on that is of vital interest to those even remote from us; knowledge of the past, of how ideals and institutions and governments have developed, all knowledge that builds up in the individual mind and heart a world like the real human world of striving, suffering, rejoicing; that opens and enlarges the mind and broadens the sympathies, that makes him a better citizen; the teaching and experience that enables him to appreciate the beauty of God's handiwork in nature, and of man's ideals and aspirations in music and art—none of this must be neglected.

For more than a generation now, however, the work of the school has suffered because of a confusion of methods and because nature's "hit-and-miss method," as John Burroughs calls it, has been followed in teaching purely mechanical processes. To a certain extent the reverse is also true and the method of teaching mechanical processes has been followed in those subjects that are in no sense mechanical, but are nourishment for the growing feelings and reasons.

Some educators have declared that the chief reason for teaching a fact, such as 5×7 equals 35, was not the fact itself but the development of the pupil's character which would result from the proper teaching of the fact. Because her class studying multiplication knew the facts of that table, and could always give the product of any numbers less than twelve instantly and correctly, it did not necessarily follow in the teacher's mind that her work had been successful. So she lost, and her pupils lost, much valuable time over "the process." Alice Freeman Palmer used to tell of a little girl who was struggling one evening over a simple problem in arithmetic. Mrs. Palmer offered to help her and said, after looking the problem over, "Why, this is simple. Don't you see what the answer must be?" "Yes, yes," the child replied, "I know what the answer is. It's the process that troubles me."

Now in elementary education, and by that I mean such education as is supposed to be imparted in the grades below the high school, the number of facts which the pupil completing the grades must know at once, without hesitation, almost if not quite automatically, is astonishingly small. These

facts—this body of knowledge—I call the minimum essentials. The sum of any two figures when the sum is not more than twenty, the difference between any two figures when the larger is twenty or less, multiplication thru the table of twelve, and the reversal of the same in terms of division, denominate numbers, and aliquot parts of one hundred—many would accept these as the minimum essentials.

Even to satisfy the most exacting we should be obliged to add but little to the list. In Leominster we have separated these facts from the larger body of arithmetic with its definitions, rules, and problems, and put them in simple systematic form on sheets of paper, a study and oral test sheet, and a written test sheet for each grade, and the arrangement is such that pupils attain 100 per cent in the essentials and do the work in one-fourth of the time usually given. For illustration, all the facts in subtraction thru the number twenty are printed on a single sheet of paper. The pupil has this for study and the teacher for the oral drill tests. The pupils study and the oral drill in no way prevents the teacher from making sure that the child has a clear and definite idea of numbers and that he is not reciting names and symbols that have no meaning to him. A similar paper, but with the facts differently arranged, is printed for a written test paper. All the answers to arithmetical questions in subtraction that a child is expected to know mechanically can be given orally in three minutes or less, in some cases in one minute, if the pupil knows them thoroly; this includes all facts thru twenty. The answers can be written in on the written test sheet in a very short time. The time element is very important and teachers keep records of the time taken. Knowledge and rapidity are almost invariably found together. In a similar manner, correct usage, including words commonly mispronounced and the principal parts of verbs like "lie" and "lay," the ignorance of which causes confusion and error in our speech, are arranged and printed both for study and for test. We are gradually extending the work, intending to cover all the facts that should be known, in this manner.

Because of the extensive additions of the past generation to the elementary-school curriculum, the teacher of today finds the amount of time and effort that she can give to teaching the child these essentials materially diminished. Altho the essentials in any given subject are comparatively few, yet because they have not been definitely and carefully separated from the large number of other facts of less importance, they are often, indeed usually, no better taught than are those that are of little importance.

When I studied arithmetic in the grades, aside from the number facts necessary to perform the four fundamental processes, there seemed to be no recognition of the relative importance of arithmetical facts. Tho I lived in Illinois, the Vermont rule for partial payments was taught to me with as much zeal and persistence as simple interest and mensuration. Alligation'

duodecimals, and compound proportion were as eagerly and enthusiastically imparted to me as were percentage and common fractions. The same is true today, only not true to such a degree. The facts about number are almost innumerable, but the facts of number known to and necessary to the average American citizen are limited, and can be acquired in a comparatively short time. The same is true of every subject in the school curriculum. The number of facts that one might find available for learning, and, I am very sorry to say, also for teaching, about North America, is truly unlimited, but the number of facts that the average educated American citizen knows about his own continent is not large.

The teacher, very often, in fact usually, a young woman with little experience with either life or knowledge, faces this great body of knowledge, this imposing array of facts, and usually feels that she must teach it all, or at least all that part of it dealing with the section her class is studying.

There is not today, in either textbook or course of study, the definiteness and limitation that we should ask for under minimum essentials. Both the textbook and the course of study include a great deal more, and very properly, for beyond the minimum essentials we should come in contact with many facts that we may not be required to master as we do the truth that two and two make four.

The school reflects today, as it always has, its environment. We are commanded upon all sides to submit to tests for efficiency and to show efficient work as teachers or explain the reason why. Only weakness seeks cover under the cry that educational results cannot be tested. Doubtless the highest, the noblest, the most important work of the teacher can be tested only by the life that his pupils live, and the complete answer be given only by the next generation. Let us recognize, however, that the common tools of book-learning are of great importance, can be easily separated from those of less or of no importance, and welcome the testing of our teaching of them.

THE SCHOOLHOUSE EVENING CENTER—WHAT IT IS, WHAT IT COSTS, AND WHAT IT PAYS

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The three questions that the topic presents for consideration are practical ones: What is a schoolhouse evening center, what does it cost, and what does it pay? I shall endeavor to be as brief and concrete as possible. In order to get clearly in mind the thing itself about which we are talking, I shall ask you to come with me, in imagination, to a city out in Massachusetts and see a schoolhouse evening center in actual operation.

The early twilight of a New England winter evening has already deepened into night; the shops and markets have pulled down their shutters

and barred their doors, the hum and bustle of the day's business has subsided, and an air of relaxation pervades the neighborhood.

But the schoolhouse windows are aglow, and the doors, swinging outward, are admitting an intermittent stream of neighborhood folk, chatting in groups and couples or hurrying along singly as tho some pressing engagement were at hand.

Inside the entryway the stream breaks up as the people distribute themselves among classrooms, assembly hall, gymnasium, laboratory, and kindergarten, manual-training, and domestic-science rooms. In the kindergarten room, a dramatic club is assembled to rehearse *The Snow Queen*, which is to be given in the assembly hall the following Saturday night as a neighborhood affair. The secretary of the club has just announced that the committee having in charge the sale of tickets desires six more volunteers to help in canvassing the neighborhood, as the sales thus far have not been sufficient to cover the expense of the new stage decorations for *William Tell*, which they are planning to give at the end of the next quarter.

Up in the science-room on the third floor the orchestra is putting the finishing touches on its part of next Saturday night's program, and later, at a business session, the members grapple with the problem of securing two more violins, a cello, and a cornet, which all agree are greatly needed to give the proper balance to the combination.

A class in mechanical drawing is hard at work in the room just off the manual-training shop, and the shop itself, by this time a hive of industry, is filled with a medley of whistled tunes mingled with the music of hammers, saws, and planes. In the eighth-grade room a class in bookkeeping is in session, and across the hall the members of the stenography class are trying to adjust themselves to the seats and desks of the seventh-grade room. The instructor has just announced, however, that the school board assures him that the new movable furniture will be in place next month and that the new desks are possible of such adjustment as will accommodate the typewriters, which thus far they have been unable to use to good advantage.

Down in the gymnasium the members of the Monday, Wednesday, and Friday study classes are having an evening of social dancing, the music for which, in addition to the piano, they themselves provide by weekly dues of fifteen cents. On Tuesday evenings the young men of this group have athletics in the basement, next to the shower baths and the swimming-pool, and the young women have an equally good time with games and folk dances in the upper hall.

The men's civic club, meeting in joint session with the women's civic club, is using the assembly room for a special meeting on street lighting, a matter that has been the source of indignant protests from individual residents of that section for a long time. Now the civic club has been formed, largely for the purpose of seeing what can be done to secure the proper lighting of the streets, and tonight the commissioner of public works

is to address them. After the chairman of the special committee has placed the situation clearly before the meeting, the commissioner is called upon. He explains the difficulties that have been in the way of this improvement, which he frankly admits is much needed, and points out the steps necessary to bring it about. If the civic club would organize the neighborhood sentiment on this subject and present to the city authorities a united demand in the form of a well-supported petition, together with a specific statement of existing conditions, he feels confident that the needed improvements would be made. He promises, at any rate, to use his good offices toward that end.

Down in the domestic-science room that has been created out of a formerly little-used corner of the sub-basement, a cooking class for young women is in session. The click of spoons in stirring dishes blends harmoniously with the orderly hum of conversation that pervades the room. The daily grind of shop, store, office, and factory, for the moment is forgotten and the delightful task of homemaking absorbs and refreshes them.

In the day-school teachers' restroom, another group of girls is gathered discussing with the director's assistant ways and means of establishing a class in sewing and millinery. The school furniture in the only rooms available is not at all suitable for this purpose, and there seems to be a question whether or not the school committee will find it possible to provide a teacher. Someone proposes that the boys in the manual-training classes be asked to build tables for them and that permission to use the room in which they are now meeting be requested. A committee of three is appointed to wait upon the boys, and the assistant director promises to see what can be done about using the room and securing a teacher.

This is a glimpse of a schoolhouse evening center. There were four such centers in Boston last winter, as reported by Miss Mary Follett at the National Recreation Congress in Richmond a few weeks ago. In those four centers there were twenty-nine musical clubs which included orchestras, bands, glee clubs, mandolin clubs, and mixed choruses; also fourteen dramatic clubs; eleven plain sewing, novelty sewing, and Irish lace clubs; one millinery; eight folk dancing; one social dancing; four young men's civic clubs; one young women's civic club; one men's civic club; eight athletic clubs; one printing; nine art clubs; four boys' games clubs; four girls' games clubs (not only for the playing of games, but to prepare girls from seventeen to twenty to tell stories to children and to teach them games and songs); and four mothers' clubs: in all 100 groups meeting in these four evening centers.

Her report says:

> The young people of each neighborhood have been steadily encouraged to *do* something. If someone had a wish to play the violin, that was discovered, and he was shown some way of learning how, so that he could join the neighborhood orchestra. If a young man wished to learn to debate or to know something of civic affairs, every opportunity was given him. Dancing was favored as being as valuable in its way as civic training.

All who wished some form of activity were cordially welcomed at the centers. They did have moving-picture shows, it is true, once a week or once a fortnight, but all who came to these were encouraged to join some club and take some active part in the center.

Just now we are gathering information about the extent of this work thruout the United States in 1913. What growth it will show cannot be forecasted at this time, but we do know that in 1912, 101 cities carried on some form of evening-center work and used 338 school buildings for that purpose. In 84 cities the school board furnished light and heat, in 72 of these cities janitor's service was also furnished, and in 15 cities the total expense was paid from school funds. Trained workers were employed in 44 cities, and in 19 of these some of the workers were paid by the school board. Ten states have amended their school laws during the past two years so as to provide for the maintenance of this work at public expense.

The total amount of money reported as expended both by school boards and volunteer agencies in the maintenance of these 338 evening centers was $139,535.73; an average of about $412.00 per center. This average does not mean much, however, for some centers are large and some are small; some are open six evenings a week, and some one; some continue from October 1 to June 1, and others run for three months only.

What we *can* get at that is concrete and to the point is that the present tendency is clearly for school boards to furnish the building and equipment, also heat, light, and janitor's services, and a director at each center with such corps of assistants as the extent of the work may require. In reality he is an evening principal with his faculty, extending the community's educational, recreational, social, and civic facilities to those who are engaged in business pursuits during the day.

This work should have the full-time services of at least the principal, so that he may seek out during the day the groups and individuals in the neighborhood who might well be brought into the center, and study and keep in close touch with the needs and possibilities of the community.

A degree of self-government and self-support is injected into the plan by the various civic and social groups that naturally come together in the neighborhood, using these evening facilities in groups or clubs, electing their representatives on the central council or board, and bearing the special expenses incident to the activities that they carry on. They pay for special music, stage decorations for their dramatics, instruments for their orchestras, decorations for their meeting-places, refreshments for their social occasions, and sometimes for motion-picture films, lecturers, and entertainers.

Superintendent Maxwell, of the New York City schools, who has made remarkable progress in the development and extension of his evening schools and recreation centers, is planning to create five or six full-time positions for evening-center directors, so that the possibilities of this larger community work may be thoroly demonstrated.

An evening-center director receives from four to six dollars per day for

his services, and his assistants are paid from two to three and a half dollars. In addition to the heat, light, and janitor's service, an evening center accommodating two hundred people per night, and reaching probably four times that number during the season, would cost about ten dollars a day for salaries plus its share of the expense of general supervision from headquarters—a grand total of approximately twenty dollars a day.

This is what it costs. What does it pay? I cannot tell, nor can you. What we can do is to point out some of its products, the value of which to the individuals concerned and to society, everyone may judge for himself.

A tough dance-hall in an eastern city was gathering in the young people of the neighborhood in which it was located. The board of education of that city opened an evening recreation center in one of its near-by school buildings and sent trained recreation leaders there to organize and promote its activities. After the center had been in operation for some time, the superintendent dropped in one evening when a social affair for young people was in progress. He found about three hundred young men and young women having a most delightful time under wholesome and elevating conditions—using their own schoolhouse. On leaving the center he stopped in at the near-by dance hall that had been the neighborhood menace and found, instead of a crowded ballroom, just fifteen couples on the floor. The young people go to the undesirable places, in part at least, because nothing better that is really attractive and that meets their social needs has been provided.

Men and women who have been all day under the direction of other people, or who are bound by the thongs of necessity to uninteresting and monotonous tasks, need in the evening something more than passive amusement. Active participation is what furnishes recreation charged with life-giving power. Miss Follett says of her mothers' clubs in the Boston centers:

> They enjoyed seeing their children do folk dances, but it was on the occasion when they danced the "Virginia Reel" themselves that they went home with their faces aglow and with the quickened heartbeat which meant a lifting of burdens and an easier facing of the problems of tomorrow.

For the thousands and thousands who toil during the daylight hours at tasks in which they have little interest except that these tasks afford the means of providing food, shelter, clothing, and a bit of freedom in the "margin of the day," the evening hours are the only time for self-expression and real living. During their working hours their thoughts and acts are controlled by their tasks; but in their free time they do what they like. This may or may not be what is best for them or best for society. What manner of men and women, as factors in their community life, they are to be, is largely determined by the use, or the misuse, of this free time. Those who have to do with corrective agencies tell us that 80 per cent of the offenses against society occur between the hours of 6 and 11 P.M. If this is true, and there is reason to believe that it is, the schoolhouse evening

center has an unparalleled opportunity of playing an important part among the forces that make for order, decency, and social welfare.

In his book on *Wider Use of the School Plant*, Mr. Clarence Arthur Perry points out that:

> The schoolhouse civic club, by affording a neutral meeting-ground for citizens, becomes a place for the open discussion of municipal affairs and enables the constituents to become better acquainted with their public servants. The city official who describes the work of his department at a neighborhood civic club meeting not only gives pertinent information, but deepens in his own conscience the sense of his accountability to the people.

The keynote of the twentieth century is organization, co-operation, and solidarity. To train people for real democracy, to help them to learn how to live and work and play together, is the new and vital task in public education that the schoolhouse evening center, properly conducted, is destined to perform.

A playground was much needed in one of the crowded sections of Amherst, N.S. Public-spirited citizens had personally urged the city authorities to provide it, but without success. The director of the community center that was just being formed there took up the matter and presented the situation to the several men's clubs affiliated with the center. A committee of one of these clubs organized and carried out a campaign of letter-writing by the children of the neighborhood, so that every city official and every citizen of influence received a considerable number of letters from the children requesting his assistance in their cause. In addition, the clubs passed resolutions and sent committees to present them to the municipal authorities. The result was that, when the playground question came up for consideration, the necessary funds were secured. What the people working singly had been unable to do was easily accomplished by united, organized effort.

In the days of ancient warfare each man with his spear and shield did battle as best he could individually against the opposing forces. It was a hand-to-hand, personal encounter, in which man matched strength with man. Then came organization, and out of it the renowned Greek "flying wedge" was evolved in which the whole army, massed in the form of a great wedge, the men shoulder to shoulder and stride with stride, would sweep across the plain and hurl itself with irresistible force upon a single point in the enemy's line. The "flying wedge" became in warfare a mighty co-operative machine against which nothing could stand.

Today in the struggle for civic and social betterment men and women are discovering that progress comes slowly when one fights alone. Therefore they are uniting their forces, and the schoolhouse evening center, furnishing wholesome recreation, establishing right ideals, organizing, vitalizing, and focusing, is becoming the "flying wedge" of educational, civic, and social progress. This is a suggestion of what the schoolhouse evening center pays.

MEASURING RESULTS

L. R. ALDERMAN, SUPERINTENDENT OF CITY SCHOOLS, PORTLAND, ORE.

Those who in any endeavor have reached their goal must first of all have had a goal at which to aim. All admit the great need of having a goal in education. Most of us agree that our real object is effectually to fit the child for the best life he can lead. This can be done by establishing habits, and by measuring habit formation we measure our real results. The things that count in childhood are the habits established plus the ideals gained.

In teaching we must give our pupils practice in the things they are going to do in life, and see that these things are practiced, so far as possible, in the way they are to be done. Thus right habits may be established, and right action becomes almost involuntary.

How is one going to make the aim in education the forming of habits? Are not these too elusive? Can they be measured? It is difficult to measure any of the results of education, yet there is a possibility of our being able to measure habit formation as accurately as we measure knowledge.

During the past year we have tried an experiment in some of the schools of Oregon which, I think, is worth calling to the attention of the National Education Association. We do not claim for it that it is the solution of all our educational problems, or that it is new or original. It was suggested by a chapter in W. G. Bagley's *Classroom Management.* We have long felt the need of some scheme whereby we might measure our work. The proceedings of this Association for the last few years show clearly that educational leaders are trying to find some meter that can be fitted to our educational pushcart. In order that the teachers of Oregon might have in mind the things they wish to accomplish, we made an observation chart, on which they might mark the pupils in their progress in forming habits. The pupils are marked on the following habits: good posture and voice quality; health; industry; neatness; elements of leadership and self-control; willingness to co-operate; ability to form true judgments; frugality; altruism and helpfulness at home; scholarship. It may be argued that these are not the most important things, yet they all have their place in the make-up of a successful man or woman.

A good posture adds to one's self-respect, and the respect one can command from others, as well as to one's health. Yet good teachers every day are allowing pupils to acquire the habits of lounging and stooping.

The quality of voice is partly a habit. How much voice quality affects our early impressions of a person is realized when we meet someone for the first time over the telephone. Voice quality may be improved. I have visited schoolrooms where the pupils all had pleasing voices just as a result of a little attention to this during the year.

We mark pupils on state of health. I have found that a little conscious effort on the part of a teacher may often prevent what might have proved serious trouble in the health of a pupil. I have heard other teachers say they did not have time to give attention to the health of their pupils, because it was not in the course of study. Then let us put it into the course of study, and teachers will find time for it, because it is there.

Again, the people who really succeed in life, by method and not by accident, are those who know how to work. Ability to work is a habit. How many young people do we see going thru school, who get over, or under, or around their lessons, and yet do not really learn to apply themselves. "Happy is the man who has to work, and in working finds the thing he likes to do." I pity the young person who has reached the age of twenty and has not learned to apply himself. His efforts are spasmodic, and he has a handicap that only the heroic can overcome. The habit of work must become so fixed in us that it will be woven into the very fiber of our being, and become as natural to us as breathing. The worker wins.

Neatness is a habit. The pupils who come to school day after day with dirty finger nails, whose coat collars are turned up, and ties are crooked, will go thru life with crooked ties and coat collars disarranged. But more than that, they will go thru life missing opportunities, because of untidy habits of work and appearance.

The elements of leadership can be developed while the boy is in school. The basis of leadership is self-control. Self-control is a habit. Make it important by emphasizing it in the course of study. And with the habits of self-control and leadership goes the habit of willingness to co-operate. How many communities are handicapped because the good people have not learned to work together. Children love to help. They love to co-operate if they feel they are helping. These qualities can be cultivated, if attention is directed to them.

How many of our schools put a premium on guessing! "Who can give the answer first?" is the question asked. We have seen over and over again a pupil being asked to guess at an answer to a question. While quick thinking is to be cultivated, we as teachers must be careful lest we carry this too far, and encourage guessing. Only that attitude of mind that can hold judgment in abeyance until all the facts are at hand upon which to form a true conclusion will win the confidence of others.

Frugality is a habit. Yet how many business failures do we see, how many divorces are sought, because people are spending more than they are earning! If we can clearly show the moral wrong of spending what is not ours to spend, if we can make the satisfaction of a dignified economy seem greater than the satisfaction of possession, if we can make this a fixed attitude of mind on the part of our pupils, we shall be reinforcing them against some of the temptations they will meet later.

Altruism, unselfishness, of course, includes every other moral quality.

I am not afraid that too much consideration for others will be developed even if we do make a point of it. Public spirit is a part of altruism that may be made a habit. If the individual is inclined to think that society owes him a living, the schools must combat this idea, and show him that he owes something to society. Each child should do something for the school. Each child should feel some responsibility toward the school. Loyalty and consideration are thus developed.

If habit-building becomes the aim in education, education will not consist merely of work done in school. Anything that affects a child's habits is part of his education. The home at once becomes an educational institution. The school is really only the helper of the home. In order to establish habits of industry with the hands, the home must do its part, which it will gladly do. In every home there is work to be done. This home industrial work brings back to the school the home atmosphere, and enables the teacher to get an insight into the home conditions. It gives the teacher a talking acquaintance with home duties, and thus makes her a real individual to the pupils. It also enables the teacher to know what pupils are overworked at home. I think some of the greatest injustices in this world are wrought by teachers who do not know the home conditions of the pupils.

One thing everyone must keep in mind in school work is that with any real education the student must have a purpose, as well as the teacher. As soon as a teacher has discovered the bent of a child, has found what things that child likes to do better than anything else, she has gone a long way in establishing a purpose for his being in school; she has discovered the means of reaching the child's inner life. A teacher has not begun really to teach until she has found the pupil's bent. Each child at each stage of his development has some interest. It may not be a permanent one, but at the time it is the motive power that propels the ship. The real teacher adds fuel to the flame of his interest. A boy did not like mathematics. His teacher discovered he wanted to be a steamboat engineer. On his uncle's boat he had taken trips to Alaska. He had watched the engineer control the throbbing engine that propelled the ship for hours at a time. His teacher told him he could be a great engineer some time on a great ocean liner, but in order to do so he must understand mathematics. An ambition was awakened and a determination formed. By a little coaching he was able to make up a year's work in half a year, and it was not long before he was leading his class.

The first difference that definiteness of aim will make in our educational system will be a closer co-operation between the parent and the teacher, and a fuller realization of the influence of the community. When you have as the only aim in education the giving of knowledge out of books, there will be little real co-operation between teacher and parent, nor is there much need of the interest of the community. When the aim is to establish habits

—concrete, definite habits—there must be the co-operation of all these forces, and the teacher must realize that she is teaching a live, sentient being, who is influenced by all things with which he comes in contact. It will be discovered that the schoolroom is not the only place to impart knowledge, but that the critical moment and the most sacred time is whenever the child is in action, whenever he is doing the thing he wants to do, the thing that he finds worth while doing. The habit-building plan will lead to taking excursions with the child, and entering into the child's labors. It will mean going into situations with the child where sympathy is developed, and quick action is required. It will mean placing the child under such circumstances that his ego is for the time lost amid the multiplicity of impressions that flood in upon him. It is striking the iron while the iron is hot. It is living with boys and girls, teaching by example as well as by precept. It will mean that every parent will become a teacher. It will mean that every teacher will be, at least in some measure, *in loco parentis*.

THE NEW RURAL SCHOOL

NEIL C. MACDONALD, STATE INSPECTOR OF CONSOLIDATED SCHOOLS, VALLEY CITY, N.DAK.

(*An Abstract*)

In order to develop the new rural school, we must be fully informed as to what the one-room school in the open country really is, and then we must reorganize this old rural school. There never can be any progress worthy of the name in any line except where all the conditions, both adverse and favorable, are known and appraised at their full value. It is never a pleasant task to recognize this fact and particularly is this so in the case of the rural school where the adverse conditions so dominate the situation. This, however, I shall try to do at this time. The praises of the little country school have been sung for more than a hundred years in every section of the land. We have been taught to look upon it as a school without fault and without blemish. And it has been a great institution. It is yet the greatest socializing and Americanizing agency in the rural community today. However, it has most serious faults which I shall proceed to name and describe.

This old rural school has been aptly described by our honored president, Dr. Fairchild, as "the one laggard in the educational procession." Some forty years ago it competed successfully with the town school, and it contributed its pro rata share toward American civilization, but it does neither thing today. For in the wonderful progress that has been made in all fields of human activity, it has failed to keep pace. We live in another day with vastly more complex duties to perform, and our nation needs not only an improved rural school, but a reorganized rural school—a new rural school.

THE NEW RURAL SCHOOL

The creation of the new rural school most needed to meet the demands of today calls for reorganization along two principal lines, viz.: (1) better school organization, which means consolidation; and (2) better attendance, which means longer terms and the daily presence of all available pupils. It is true that we need reorganization which would give us better financial support, better teaching, and better supervision which includes administration; but these will come largely as a part of the development of this new rural school.

Better school organization calls for consolidation. One of the two most serious defects to be found in the one-room rural school is the problem of the many grades and therefore too many classes per teacher, which, unsolved, largely nullifies the good effects of properly built and equipped buildings, and the best efforts of the best-trained teachers and supervisors. Consolidation, however, remedies this, for by the employment of two or three teachers the number of grades and classes per teacher is reduced. Experience has also shown that consolidation will in part overcome the most serious defect of the old school in the matter of poor attendance, which includes the short term, for consolidation is followed by better attendance, including longer terms. Consolidation makes it possible to secure better-paid and better-trained teachers and better supervision than under the present system. It provides high-school privileges for the country youth while he is under the parental roof. This is cheaper and safer for all concerned, and it lays the foundation for rural leadership right at home. It provides the opportunity for the proper teaching of agriculture, household arts, and other subjects, and for the organization of civic-social centers on a scale that would make them more useful in every way.

To hasten and extend the growth of consolidation, we must have better laws to facilitate its organization, and in any case, we must have abundant state aid. This, too, like other reforms in rural-school education should be nation-wide. Consolidation is growing, for already thirty-two states have it in operation. But experience has shown that where the initiative for its organization is given largely to county or state authority, rather than to local, and especially where liberal state aid is provided, its growth is phenomenal.

The matter of poor attendance which includes the short term is the greatest defect in the rural school as we know it, and it presents the greatest problem in rural-school organization. An analysis of available statistics shows that the average term for the one-room rural school in the open country is less than seven months, the percentage of attendance is less than 60, and as a direct result the percentage completing the eighth grade is less than 25, the boys falling below 15 per cent. This means that the average country boy can hope to complete the eighth grade only in about seventeen years, or when he would be about twenty-three or twenty-four years old;

while as a matter of fact, only one country boy in seven of any age completes this grade. Herein lies the damning tale in rural-school administration.

From this poor attendance have ensued many serious evils, such as high rural illiteracy, rural-to-urban migration, loss of rural national leadership, and the evils of rural child labor which are shown largely in the small number of boys who complete the eighth grade.

The causes of this poor attendance as related to rural child labor are due mainly to the practice of petty politics and mercenary greed. The new rural school costs more money—both to build and to operate. This means that that kind of politician who is by turns a political jacksnipe and a political pirate would of necessity oppose it; for he thrives upon cheap money and much ignorance of his fellow-man, that is, upon the evil results of child labor on farm or in factory. Another cause of this poor attendance in relation to child labor is "commercialism," that is, greed on the part of the rural resident. This is a tale of sordid greed and criminal thoughtlessness. The poor attendance including the short term costs little and so is favored by the mercenary rural resident. Then, too, children out of school and at work lessen the cost.

To improve the poor attendance and thus remove the evils of rural child labor, rural illiteracy, urban congestion, and loss of rural national leadership, there should be legislation establishing a minimum term of at least nine months and compulsory attendance until the eighth grade is completed or the sixteenth year is attained. This, like other reforms of national need, should be taken up by all states in order to give it greater force, effect, and following.

This new rural school, so greatly needed in every part of the Union, demands for its development, (1) improved organization, that is, consolidation, and (2) better attendance, which includes longer terms. These call for a campaign of investigation, publicity, and education to furnish new ideas and to create higher ideals among the rural population concerning their duties to their schools and country. To hasten and extend this campaign there ought to be greater co-operation among school officials of at least adjoining states. For instance, it is very difficult indeed for school officials in North Dakota to contend for a nine-month term with a strict enforcement of a compulsory attendance law, if over in Minnesota little or nothing is being done in this matter, or if the reverse be true. It requires united action of a group of adjoining states and that supplemented by all the states, in order to carry on this campaign to a successful issue.

I wish now to conclude with a picture of the new rural school, that already exists in some states, which fact gives us faith to believe, hope to endure, and courage to contend that this school shall finally be established practically everywhere in the open country. This school is housed in a commodious building that is modern in all its appointments. It is equipped

with splendid library and laboratory facilities. It is surrounded with a beautiful campus and well-planned experimental fields. It stands there a thing of joy, for it is a thing of beauty. In itself, it beckons and commands the youth of the community to enter its portals. The teachers are well trained, well paid, and well content. There is a home upon the grounds for the principal and his family, and for the teachers also. All available boys and girls attend regularly nine months, and they complete the eighth grade and high school with the same degree of regularity and efficiency that they do in the average town school. This school is more than a civic-social center, for it is an educational center in the best sense of that term. For here come young and old to consult with the instructors in agriculture, mechanic and household arts, literature, hygiene, and other subjects, to read in its splendid library, to see good works of art, to listen to inspiring lectures, to take part in literary and athletic exercises, to learn best how to grow old and young in a wise way.

EDUCATION AS THE INTERPRETATION OF LIFE

MARY C. C. BRADFORD, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, DENVER, COLO.

(*An Abstract*)

It has been well said that almost all the battles of the world have been fought for the sake of so soulless a difference as that lying between conflicting definitions.

And yet there is reason in this strenuous advocacy of one or another kind of definition, for, if we may define a definition, it may be done in some such phrase as the following: A definition is a condensation in words of a principle, a thought, or a movement. It is, or should be, the verbal expression of essential truth.

When we concede this, it is not strange that the leaders of thought in the school world have long been seeking a definition of education that should be at once exact and expressive; that might contain the divine fire of educational inspiration in a form both logical and lucid. As a result, there have been almost as many definitions of education as there are distinguished leaders of educational thought, and, tho not ranking myself in that goodly company, perhaps I may be pardoned if I venture to give the definition of the august science and beautiful art, in whose service we are all enlisted, that has proved most helpful to me.

To my thinking, education is the interpretation of life in the terms of truth, beauty, efficiency, and service.

And the application of this interpretation should be the widest possible. To confine it merely to classroom problems is to limit and emasculate a vital philosophy, to cut off the power and purpose of a great profession from

vivifying the life of the home and the community. Social unity is the prerequisite to social regeneration, and the surest way to effect the social transformation is to realize actual co-operation between the home, the school, the club, the labor union, and the newspaper; treating all these interpretations of life as educational agencies and uniting them in the service of truth—the effort to see the thing as in itself it really is; beauty—the expression of harmonious relation in color, form, and sound; efficiency—such an adaptation of means to end as will produce an adequate result; service—the consecration of each life to the fullest individual development in order that the common interest may be served with power and blessed with love.

In the schoolroom our interpretation of truth comes largely thru the study of science, the exact and classified knowledge of the way in which nature works. Our touch with beauty is effected again thru nature—the color and form and sound to whose loveliness we respond with the thrill of worship and the power of expression that we call art. To the studies that foster truth and beauty we add those that make for bodily efficiency—the trained hand, industrial arts, with vocational guidance as a preparation, playground activities, and general athletics—these all make for efficiency; while every study should have as its keynote the idea of service.

From the humanities to domestic science; from the mastery of language to the manipulation of wood; from algebra to agriculture, and all wrought thru logic and love, educational interpretation should be in terms of service. This includes all the rest. In the educational beatitudes "the greatest of these is service." In education as applied to life the "Quest of the Grail" brings us to a conception of the truth that brotherhood is a fact in nature and that only he who lives in the community welfare can work out his own salvation.

This general thesis may be applied to every phase of education, to every type of school. Rural education, with which this session is chiefly concerned, and with which department of education lies my own most direct connection, must concern itself with translating the work of the school into the language of the home and the community. The classroom work of the country child should be such as to give a meaning, a purpose, and a unity to the hours spent in the farmhouse and in the field. And when this clarified vision has become his, the work of the school should lead him to see and feel the vital connection between his own environment and opportunity and the enlarged environment and opportunity of his community, state, and nation.

The contribution of the American public school to the world has been the production of a type of citizenship that will some day make possible the establishment of a righteous government and a true civilization; a government that shall demonstrate in truth, beauty, efficiency, and service the art of living together in organized communities so that the best may pre-

vail; a civilization that shall mean the realization in human institutions of the highest ideals of all the citizenry living in any given time, in any given place.

To demonstrate such a government, to realize such a civilization, is the great task set the teachers of America by the mighty nation whose high priests they are. So to interpret life that the home and the school and the club and the labor union and the newspaper may become conscious of their essential unity in the service of the supreme educator, responsibility—this is the thing that is set us to do.

May we have power, single-heartedness, clear vision, and loving consecration in the prosecution of this high endeavor. May we be worthy interpreters of "the mighty power that makes for righteousness," so that the little child, being lifted up, "may draw all men unto him."

SOME SOCIAL USES OF EDUCATION ACCORDING TO NATURE

W. E. CHANCELLOR, EDITOR, "SCHOOL JOURNAL," NEW YORK AND CHICAGO

The uniform common school is growing wider and higher into the various universal school. In social and institutional relations, the history of man has always been a history of conflict between social regimentation and individual self-realization. One ideal has been social solidarity, the other personal freedom. One practice has been uniform schooling; the other personal development.

THE DIFFERENT PATTERNS OF LIFE

Plato, immortal for his previsions of truth, said in *The Laws:*

> As the shipwright first lays down the lines of the keel and draws the design of the ship in outline, so do I seek to distinguish the different patterns of life and to lay down their keels, according to the natures of the souls of different men; seeking truly to consider by what means and in what ways we may best go thru the voyage of life.

THE THREE NATURES OF MAN

Until, however, to an extent, science had revealed the several natures of man, education according to nature could not be secured. These several natures are those of himself as a human being, of his habitat with its climate and resources, and of his community with its races and society. Science is a rigid, uniform, universal method of fact-gathering and collating, of qualitative analysis upon principles involved in the field of the facts under review, of quantitative measuring, and of statistical computing with a final interpretation and recording. Whatever is dim, complex, vague, and unnumbered; whatever is obscure, mixed, boundless, and not yet "down in the books" is an open invitation to science and challenges investigation, analysis, measurement, and recording.

SCIENCE AND EDUCATION; ORIGIN OF MAN

Such science has given to us political economy, sociology, anthropology, physiology, somatology, psychology, and psychophysics for the interpretation of man as a physical creature, as a mind, and as a social factor. It is a scientific hypothesis that man originated in a conflict between the Asiatic great apes, the orang and the gibbon, which are red haired and yellow skinned, and the African great apes, the gorilla and the chimpanzee, which are black haired and brown skinned. By this hypothesis, the conflict proceeded while the ancient Mediterranean Ocean was drying up to leave remnants in the present Indian Ocean, Red Sea, and Mediterranean Sea. Out of that conflict, Adam, made "of the dust of the earth," emerged as "a living soul," and "eating of the tree of the knowledge of good and evil" became man, the same in natural character thru all generations. Whether this hypothesis be true or not, the animal instincts, either derived from animal ancestors or imitated and acquired by training from them, are almost ineradicable in man, who to this day is the scene of warfare between flesh and spirits. Perhaps Satan is a magnificent and terrible figure of speech by which man has personified the carnal depravities of his animal instincts. Perhaps Lucifer is a figure of speech personifying the depravities of his psychical powers. Certain, at least, is it that ideals fight daily with animal instincts and with intellectual plans for their gratification and are seldom perfectly victorious. Most men are not yet free.

THE MISEDUCATED

For a varied world of unnumbered opportunities and needs, education still outfits all candidates in scarcely more than a half-dozen uniforms of ideas and modes of conduct. Too much we deal with terms for which there are no correlates in reality. The school world is too much a world of illusions and of delusions. We go on and on, setting the physical giant to selling buttons over a counter; making natural mechanics into lawyers; natural housewives into teachers; natural sailors into clerks. Everywhere we set men and women at tasks contrary to their natures. Everywhere are smash-ups and breakdowns. What with thin, nervous men for judges, with big, cheerful men for directors, with young men who can neither see nor hear for reporters, with young women who are too weak for home-keeping to be wives and mothers, we make many sorry messes of courts, of business, of journalism, and of homes. We most need these very men who can see and create. We also need men who can establish and maintain independent livelihoods.

There is but one way that we can follow so as to increase by education the numbers of those who are self-directive, and that is to educate all according to their natures.

PHYSIOPSYCHIC FACTS WANTED

We must know the natural energy of our boys and girls, and their metabolism and blood-pressure, and how, by diet and other regimen under the prevailing climatic and social conditions, to increase this energy. We must know their sense-powers of hearing, of sight, of touch; and wherein their natural motivation from sense-images is strongest, wherein weakest. We should know the length of the memory-span and its strength; and the extent and intensity of the fields of imagination and of judgment. We must know the dominant instinct and their other prominent instincts, chief of which are fear, curiosity, and hope; their habits; their ideals; and their environments.

THE FIRST BUSINESS OF EDUCATION

The first business of pedagogy is pedagogy—leading children. The first business of education is educating—making powers come forth, awaking the sleeping potentialities of children and youth. For some thousands of years many have supposed that the first business of pedagogy and education was scholarship—knowing all about reading or English, music or geography, Latin or philosophy or law, or any specialty or generality—whereas in truth the teacher needs to know all about children and youth and adult, and can get along nicely with only the elements of so-called subject-matter. The first business of education is to educate, the last business is to impart knowledge. Of course, boys and girls do not like to be educated; they wish to be as they are, unchanged in quality, but enlarged. This pride, carefully considered, is a sufficient reason for educating them out of what they are into the larger and better self which the educator believes they are capable of becoming.

ATTEMPTING THE IMPOSSIBLE

Strange as it sounds upon first statement, only moderate powers need seriously to be worked upon by the educator. It is criminal to try to make the non-ear-minded auditory. John Pierpont Morgan was eye-minded, loved pictures, was the first bookkeeper in the world; and hated to be talked to. Abraham Lincoln was ear-minded, loved conversation, was the best listener in the world; and read but little, and most of that aloud to please his ear-mindedness. All artists are eye-minded; all poets, ear-minded. And save for experts it is a work of supererogation to try to educate those with congenital gifts. Some are born farther on in skill than others can ever get; the would-be teacher is behind the learner. Once a little boy at home said to his music teacher, "Quit doing dat; hurts boy's ears." He was born with absolute pitch. His teacher slightly flatted, despite training.

LONG TENURES NECESSARY

Because it is the duty of the educator to know every individual, it is necessary for him to stay long in the community. It is arch educational heresy, it is crime against the community, for its teachers to be pedagogical

journeymen, school tramps, vagrants, shopping about from state to state. Every great school has had a relatively permanent set of teachers. A merry-go-round school only amuses and cannot educate its scholars. Similarly, a kaleidoscopic school superintendency makes bedlam of the schools. Every great school system was created by superintendents of long tenure. This is not the notion of democratic rotation in office, but it is historically derived good sense. Long tenure for supervisors and for teachers is the salvation and permanent sanctification of American schools.

THE TEACHER AS COMMUNITY SURVEYOR

Only one who has lived in a community for many years really knows it; nor does even this one know it unless he has taken a deliberate survey of it—knows the number of persons engaged in the various occupations; their incomes; the strength and weakness of its social institutions, of its organizations, of its leading and lesser citizens; knows its associations and movements, and its progressive and retrogressive tendencies. As the lawyer and the physician usually make a life-work of their professions in the same communities, so also should the teacher. The patient who does not wish his physician to know his family history will, when he falls ill, probably die; and the student whose teacher does not know his family history must probably miss an education according to his nature.

Many a young educator, seeing a city full of enterprises of one kind, immediately jumps to the conclusion that the school youth should be prepared for this kind of enterprise. But because a city is full of textile mills and of mill operatives may be a very good reason for not training the boys and girls as textile workers lest wages fall yet lower. Because the city has no farms and almost no gardens may be a very good reason for teaching its youth agriculture.

America has now twelve hundred gainful economic occupations and three hundred non-gainful yet economic occupations. Inventive and original men and women pursue ten thousand economic enterprises not numerous enough to be cataloged.

ETHICAL VARIETIES OF OCCUPATIONS

Educators operate not only as teachers of individuals but also as social engineers. Because a youth is interested and skilful in organic chemistry and because a brewery offers a good salary to him as a chemist of malt liquors, or a distillery for services as a chemist of alcoholic spirits—perhaps so called because they awaken the demoniac spirits in the human soul—even taken together these do not constitute sufficient grounds for educating such a youth at any cost public or private as a malt-brewer or as a whiskey-distiller. Because a man has the various talents required of a card sharp this would not constitute sufficient grounds for educating him as a poker-player for money stakes. Stock-gambling, likewise.

Occupations may be classified as beneficial, as innocent, and as pernicious. The educator as social engineer should train youth for vocations that are both fairly profitable and socially desirable and beneficial or at least innocent. In truth, vocational instruction halts upon our need and want of adequately prepared vocational instructors of many kinds. Especially do we need superintendents of schools and professors of education who know something of the general meaning and local circumstance of vocational guidance.

DEVELOPING THE RESOURCES OF THE HABITAT

This great West, with its agricultural and mining interests, needs local markets thru the spread of manufacturing and commercial enterprises. It should sell its orchard and garden fruits, its cereals, its metals and minerals, its sugar and leather at home. To develop local manufacturing industries, develop in the schools youth who understand such manufactures. Nature never intended all the children of the western plains to be ranchers or all the children of the eastern cities to be traders or factory hands. Everywhere human nature is polyphase and various. Every community should be reasonably various even tho this temporarily reduces railroad freight and dividends.

THE DEVELOPMENT OF THE UNIVERSAL AND VARIOUS SCHOOL

To get the universal and various school, several changes are requisite. First, there is requisite a change of opinion and of tradition in the teaching profession itself to the effect that each youth has the right to be developed according to his aptitudes within the reasonably inferred limits of his capacities in the direction of his norm. Educators need to see that in nearly all instances perforce the uniform school is crippling and stultifying.

Nearly every boy and girl should work at least part of the time in school until twenty-one years old—for their sakes and for our sakes—lest they enter the world ill-prepared to serve and lest they lose their lives for want of knowing how to serve their day and generation. No youth should be graduated from school into the life of the economic world until educated as far as his original heritage of powers permits.

There is requisite, second, a change in the public conception of teachers. We are not mere school-keepers and child-tenders. By education, youth are regenerated. Like irrigation, teaching turns many a desert into an oasis. Because the teacher is an individual educator of talent and of genius, he is also a community-architect, a social engineer, a nation-builder.

Third and last, there is requisite, at least in the East, a change in the opinion and tradition as to the nature of educational costs as investments of time and of funds in posterity. We teachers could not, even if we would, stop the American people from spending ever more and more money for education in a ratio faster than the increase of wealth, yet causing that increase. We double our total expenditure now with every decade. This

stupendous fact, when wealth computed in money increases only one-quarter every decade and population not quite one-fifth, must sink into the understanding of all teachers and become one of our canons of judgment. We propose to get for teachers the best men and women, even if in some cases we must take experienced mothers and still more experienced grandmothers out of their homes and reject both overtrained masculine mediocrities, and young girls who need the wages.

LET US SAVE NEARLY ALL

We must find the way to end the oppression of the poor and the angering of the discontented thru forcing annually into overcrowded labor markets some three million youth of whom scarcely one in twenty is now fitted to the limits of his special capacity of social service and of personal support.

We must cut off at the sources in childhood and in youth the supplies from which are recruited annually some sixty thousand or more prostitutes who are such usually because they know nothing of economic value and of personal interest to do. There are more such women in America than there are women school teachers. We graduate into the world from school annually more than a hundred thousand other youth fated to steal, to defraud, to defile, to kill, to burn houses, to wander up and down workless and wageless, to enter our asylums and hospitals, our jails and penitentiaries. By studying their natures in childhood, by studying their communities to see where they will when educated fit in, by studying their habitats to see whether farm or field, mine or river will receive them with welcome, we can save every boy and girl who is not defective in high degree.

Let no man who has secured self-realization and freedom thru large educational opportunities deny equal opportunities to the youth of this decade now; equal opportunities, not the same but always such as are according to the natures of the youth, of the habitat, and of the community.

The universal various school means the school adjusted to the powers, the needs, and the interests of the flesh-and-blood different boys and girls whom we know and love, for whom we labor, whom at last we are beginning to understand, and who will judge us when we pass from here.

EACH BORN TO A SPECIAL SERVICE

There is no arguing over facts. Truth never retreats. False belief dies hard, but it dies. We shall never regiment humanity into righteousness. Naked and alone the soul goes up to God. The school that conventionalizes warps nature; it is Egyptian, not American. Human variety is compelling education to radiate as variously. The wage scale is also a scale of human demand. Thoroly considered, we all live by social favor. We know the pit whence we were digged. To get us all out of it forever, each must be educated according to nature that he may render to all the peculiar service for which he was born into the world.

THE SCHOOL PLANT AS A PUBLIC-HEALTH ASSET

CAROLINE BARTLETT CRANE, SOCIAL AND SANITARY EXPERT, AND INVESTIGATOR OF MUNICIPALITIES, KALAMAZOO, MICH.

There is one elect place and matchless opportunity to lay the foundations of public health, and that is in the body, mind, conscience, and daily habit of our future citizens while they are in the public schools.

I wish to speak tonight of some overlooked opportunities for advancing standards and practices of public health thru the building itself and its equipment and administration.

Our cities "grew"; our schools were planned. In the city each generation bonds the next in an effort to remedy blunders of previous generations, with the result that present achievement in public sanitation lags far behind our highest knowledge on the subject. But each new school building is like a city planned and created in advance of its population. It should invariably express, in plan, equipment, and administration, the highest sanitary knowledge of the time, and should be utilized not merely as a present health asset but as an activator toward improved public sanitation.

There are a good many new school buildings today which closely approximate the ideal. They are the pride of the city and the pride of the teachers and children. They house from a few hundred to one or two thousand pupils. They so obviously constitute a little city under one roof that it is no uncommon thing for the school to be completely organized on the municipal government plan, for improvement of present order, and for education and training for future citizenship.

But also it should be noted that in this school city are actually duplicated the more vital sanitary problems to be met in the surrounding city and in its individual homes. However, in the model school these problems have been anticipated and solved before the arrival of children or teachers on the scene.

For example: housing is both a domestic and civic problem. So is the "clean-city" movement. In the latter case, the fact is recognized and in scores of cities the schools are the centers of clean-up campaigns which extend from the school building and grounds clear to the home cellar and backyard. Colonel Waring, when he undertook the Herculean task of cleaning up New York City, nearly twenty years ago came to the point where, in despair, he exclaimed: "Nobody can give you a clean city if you want a dirty one!" Then, thru the children of all nationalities in the public schools, he began educating the people *not* to want, and not to tolerate, a dirty city. Our improved outdoor sanitation is doubtless due in great measure to the movement inaugurated by this farseeing man in the New York schools and extended by force of its excellence thruout the country.

Why may not a sentiment and conscience for civilized housing be promoted by similar means? Many of the principles of correct schoolhouse

construction, equipment, and administration apply with or without modification to private housing; for example: surrounding space, drainage, dryness, light, ventilation, pure water, adequate sewer service, and sensible methods of cleaning. These factors should be fully utilized in creating sentiment for healthful homes and a civilized housing code. Instruction upon the origin, safe conduct, and hygienic value of a glass of pure water drawn from a school faucet is worth vastly more than a dissertation upon the Roman aqueduct; and to explain the importance of the school sewer system and the proper care of sanitary plumbing is much more worth while than to explain the pictures on the walls. Methods of dustless cleaning may be made to inculcate needed lessons in both household and street sanitation. A study of a scientific school-heating plant will bring conviction that a smoke nuisance is no necessary evil in a city. Everything in the school kitchens, from the bottle of certified milk to the plan of garbage disposal, should be made to yield its full hygienic value for instruction in both domestic and municipal housekeeping.

When it comes to matters of personal hygiene, it is by no means enough to supply facilities and to indicate practices. Pupils should be so unremittingly drilled in hygienic habits and so indelibly impressed with the vital "reasons why," that this will become the one part of their education they cannot lose.

Yet some of our most palatial school buildings are strangely deficient in even the facilities. I find bubbling fountains in cities whose water supply is known to be unsafe; individual cups carried in caps and trouser pockets, or dispensed with in favor of drinking directly from the faucets; swimming-pools in which the water is far too seldom changed; where the rule of soap and shower bath before and after is not enforced; where a comb on a chain adorns the girls' dressing-room. But most frequently of all do I find an absence of proper provision for washing hands and an absence of insistence on the part of instructors that hands should be washed. In a state as rich in school funds as any in America, I found the school buildings in only two out of seventeen cities properly supplied with facilities for washing hands. In one magnificent high-school building, housing 1,325 pupils, who study, handle school materials, visit toilets, and eat luncheons, I found—exclusive of the manual-training department—three wash sinks, cold water only, no soap, and roller towels changed every third day! Sometimes there are no towels, and teachers have gravely informed me that children use handkerchiefs or petticoats; also, that "the place for children to wash their hands is at home." With our present knowledge of the origin of disease—especially sewage-bred diseases—it should hardly be necessary to instruct teachers in the sanitary, any more than the æsthetic, reasons for washing hands. And the children we have here are the future men and women who will handle our foods in bakeries, markets, dairies, and kitchens. Surely, the much-vaunted "training of the hand" should include training of the hand to keep itself clean.

To teach hygiene out of books and give the lie to it in daily practice is likely to break down the best home-training which individual parents bestow upon their children. The "model building" will not accomplish much unless it is headquarters for model living. It must never be said, "There is no time or money." These things are what time and money were made for.

A city, however unfortunate its heritage in public sanitation, which does its duty toward its school children thru model buildings and model training in their use, will presently find its own sanitary problems fading away. The school becomes the municipal experiment station. The new knowledge, habits, and conscience of a new generation will look thru new eyes upon the unsewered, unwatered, unswept, soot-grimed areas of our cities; upon the untidiness and squalor of village and countryside; upon the stinginess of public-health appropriations and the dear penalties we pay in health, happiness, efficiency, and human lives.

But not all the "model" buildings are really models. In a certain city of 300,000, which spends lavishly on its schools, I found no really satisfactory lighting, either in quantity, direction, or control. The wings of two new palatial high schools were in each case so disposed as mutually to interfere with each other's light, and windows had actually been placed "for the outside looks" in the walls faced by pupils, and then imperfectly covered by shades. Such things do not "look" to persons who know how a schoolroom should be lighted. Sixty-five per cent of the days are cloudy in this city, and more than half of these days fall in the school year. It was explained to me that the city had employed the exclusive services of one architect for thirteen years, and I replied that the lighting was admirable—according to the standards of about thirteen years ago.

In a very ornate high school in another city, a costly covered veranda cuts off the skylight from four of the rooms. In another marble-façaded building, adorned by the sculptured names of all the school board, the fire-proofing had been left out of the floors to save expense; there were no self-opening exits; and the air was noticeably bad, while the ventilating fans were running at half-speed because there was a janitors' contest on to see who could operate his building with least expense! How one regrets to find a pretentious school building erected as a "monument" to anybody, and maintained in part by means of "economy" in fire protection, pure air, or teachers' salaries!

Or, economizing on the grade schools. There are far too many cities which are bonding so heavily to build needlessly costly high schools that they think they have no money to build new grade schools or even to keep the old ones in decent repair. Yet scarcely more than one in ten of the grade pupils, the country over, reaches the high schools. And it is the young children who are the most susceptible to the evils of overcrowding, bad lighting, bad seating, bad air, and dirt. And they are in the habit-forming period

when the model school with model equipment would mean most to their future lives. Yet it has been my far too common experience to go from a beautiful modern high school, thru which I have been conducted by a proud school board, into grade buildings with not only the defects indicated above, but with such palpable fire dangers that I wonder their use is tolerated for a single day; buildings with defective furnaces and flues and defective wiring; with closets under the wooden stairs for storage of brooms, oiled rags, waste paper, and gasoline cans; no direct exits from basement schoolrooms and toilets; no fire escapes, or such as are never cleaned in winter nor used in fire drill; buildings to which an extra story has been added above inelastic walls and stairways and exits; buildings that know no fire drill that would measure up to efficiency in case of fire; buildings that shake most alarmingly in every high wind; buildings that, by example of the manufacturer who aims at efficient production of mere merchandise, should have been thrown on the scrap heap long ago! If there is no better way, let us issue long-time bonds, and make these very children pay, thirty years hence, for decent schools now. I venture to say it will not cost them more than a "tithing" of their added efficiency.

But there are many school buildings which, while far from "model," need not be thrown upon the scrap heap. They constitute an inspiriting challenge to the right kind of teacher. Altogether the highest sanitary average I have found in inspections of public-school buildings in some fifty cities was in a city in my own state where a teacher, having risen from a desk in the primary grade to the superintendency of the city schools, secured effective filtration for the polluted public water in each of the buildings; took all the toilets out of the basements, put in more windows and fully utilized them for ventilation as well as light; secured the laying of new hall floors and stairs; made floors, walls, windows, desks, and the farthest corner of the cellar an eloquent, even fascinating, exposition of the beauty and uses of cleanness, and elevated hygienic habits to a position of priority above everything else in the curriculum, tho in academic standing his schools rank equal to any in the state. True, there was the help of a non-political school board with women on it; but I almost regret to have to say that this wonderful superintendent is a man, and foreign born: Superintendent Phil Huber of Saginaw, West Side.

There is surely an inspiring call to every public-school teacher in America—whether at a city superintendent's desk or as head of the forlornest one-room country schoolhouse. As the school becomes the social center, so the teacher must become the social leader in those things which make for improved civic and domestic life. It is obviously the duty of training schools to bestow far more time and emphasis upon school planning and school housekeeping. Then, the properly informed and trained teacher will assuredly not take what is set before him (or her) in school plant and equipment, and ask no questions; nor fear to open a window under the

frown of an ignorant janitor. But then the janitors, too, will be trained to their highly important work. Teachers, and teachers' associations, will forever be proposing better things to parents and boards of education; and we will have the "model city" of childhood everywhere laying the foundations of the model cities which today have their blest foundations chiefly in our dreams.

EDUCATION FOR FREEDOM

CHARLES ZUEBLIN, PUBLICIST, BOSTON, MASS.

The legacy of the nineteenth century was threefold: industrial organization, the democratic spirit, and the cosmic sense. The nineteenth century was appropriately called by Alfred Russell Wallace "the wonderful century"; yet its greatest wonders were not its verities but its vistas. Modern industrial organization has multiplied creature comforts beyond the dream of earlier times; it has united workers on a scale before unknown, but it has not made them happy; it has tried to exploit science, but it has not become scientific. It has increased material wealth and sacrificed spiritual value by compelling uniformity.

The second factor in the heritage of today is the democratic spirit. This has not yet expressed itself so fully in liberty and fraternity as in equality. Despite the shameful extremes of luxury and poverty a superficial equality pervades contemporary life. Everybody reads; everybody travels; everybody does what everybody else does because everybody else is doing it. More people read than ever before in history. Most of them cannot yet want good things; hence the taste of the cultivated surrenders to the popular demand. Journalism is extravagant; fiction is journalistic; the drama is sensational. The democratic spirit holds latent the larger life. It is momentarily sacrificed to mediocrity. Audacity is required to rise above the commonplace.

It is just beginning to dawn upon us that an even greater factor than the democratic spirit for the life of tomorrow is the cosmic sense. The fifteenth century knew a great deal about the remote heavens and nothing about man. The nineteenth century has taught us about the man who is at hand, and thru knowledge of him we are beginning to get a vastly larger grasp of the universe. Philosophical, religious, and other speculations of the nineteenth century have steadily enlarged the bounds of human vision. Positivism, socialism, anarchism, new thought, Christian Science, theosophy, and pantheism—each suggests an endeavor to be all-inclusive, to present a vision of the fullness of life.

Education cannot be adequate unless it takes account of this threefold legacy, which indeed is rudely done in the familiar educational trinity: education for occupation, for citizenship, and for character. Mediæval culture is no longer sufficient. The college-entrance examinations will

not do as a standard of life. We cannot train free men and women for the functions of tomorrow by a system of education designed for sequestered monks nearly a thousand years ago. We shall use our industrial organization, democratic spirit, and cosmic sense in preparation for occupation, citizenship, and character when we give the pupil his trinity of creation, service, and harmony.

The child cannot be fitted for occupation in the ever-bigger world if we merely teach him a trade or a profession. He must have not only a dexterous hand and a trained eye, but the power of incorporating his imagination in the work of his hands. Most of us need fewer and better things; all of us will benefit by knowing how to make better if not fewer things, whether we make pottery or poetry. The pupil must be taught service that his occupation may have some other goal than money-making and that citizenship may be a serious accomplishment. Hence the school must be co-operative, not competitive. The examination that reveals the conventional mind of the teacher must be surrendered to the discovery of the unconventional mind of the child. The school must become a workshop and a playroom instead of a prison or a hospital. Training for character will be secured not so much by catechism and discipline as by the exposition of the meaning of harmony.

The whole nature of the child must expand by reaching out for the whole content of the universe. He must get a world-philosophy. He must come into harmony with nature, man, and God. He will reach nature thru science, man thru art, and God thru life. Science will mean to him not the laboratory but the world. He will live and learn and work out of doors. He will come into assured harmony with nature if he has health, taken in its whole meaning: physical, mental, and spiritual. Man is revealed by the work of his hands; the history of civilization is written in architecture. The pupil will come into harmony with God, not by theological instruction, but by entering into the universal and comprehensive, even if too young to grasp the riddle of the universe. He will not be content with the knowledge of his own accomplishments or those of others; he will desire to penetrate the mystery of the cosmos and discover the unity of all things.

Thus the heritage of the twentieth century will become the possession of all children, and they will be fitted in occupation, citizenship, and character to be conscious agents in the extension of the benefits of industrial organization, the democratic spirit, and the cosmic sense. Then we shall have a society of free men and free women.

THE TEACHING OF CIVICS IN ELEMENTARY AND SECONDARY SCHOOLS

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The term "civics," which the *Century Dictionary* inadequately defines as "the science of civil government," has come much into disrepute these latter days. And no wonder, when one thinks of the dry-as-dust stuff that has so long masqueraded under that name in public and private schools alike. The emphasis has usually been placed on the organization and legal powers of government, principally national, with no live discussion of what even the federal government really does, and still less as to state or local government. In fact, the pupil in the elementary school has been lucky if he has escaped penal servitude for one awful winter, while he memorized the federal Constitution. And when the secondary school was reached he probably received another indeterminate sentence in the form of an encounter with an appalling array of juiceless facts about how we are governed, sacredly removed from practical application and carefully smuggled in with an equally uninspiring survey of United States history. And was this utterly unpedagogical performance supposed to help make good citizens? Not at all! It was supposed to be education—discipline. Whatever it was, we are fast outgrowing it. And this leaves us free to fill up this fine old word "civics" with a splendid new content.

To do this intelligently, let us first ask ourselves, frankly, this question: Why are we teaching any subject whatever in the elementary or the secondary school? Is it for the sake of acquainting our pupils with a given number of facts, both new and strange? Is it with the forlorn hope of cultivating a so-called "faculty," or of instilling a special type of "mental discipline," or of imparting a new flavor of "culture"? Or, are we content to do the thing which Froebel told us to do, nearly a century ago, and which thoughtful parents are coming to demand of us as educators, namely, to acquaint the children with their varied environment during those impressionable years of childhood and early adolescence?

If the latter, how delightful our task! And all of us may contribute. Relationships of time and space, rightly developed, will make mathematics a feast—but most of the present textbooks will have to "go a-glimmering"! Similarly, the possibilities of self-expression thru language and literature will render the class in English a joy—but the "factative complement" and the "adverbial objective" will lie beyond the reach of Gabriel's bugle-call! And when the wonderful world of nature lying all about us is revealed to the enchanted eye and ear of the young explorer, who can picture his delight —but the bones of the human body will go uncataloged, and the Strait of Bab el Mandeb will connect Great Salt Lake with Puget Sound—for all the happy youngster knows or cares! And when, finally, children's eyes are

opened to their social environment—which in the cities and towns means well-paved streets, police and fire protection, schools, libraries, parks, and playgrounds—they will experience equal pleasure and uplift—but good old Uncle Sam's vigorous Constitution will no longer be solicitously inquired after: in fact, it will almost be forgotten that he has one!

If, then, we can agree that the immediate end of teaching boys and girls is to relate them to their environment, can we come into like agreement as to the ultimate end of all our teaching below college grade? Mr. Arthur W. Dunn, in the preface to his remarkable little textbook in civics, has given us the only answer that we shall dare to stand for. Says Mr. Dunn:

> The function of the public school is to produce a good type of citizenship. There is no other sanction for the existence of the public school. The entire course of study and the whole round of school life should be directed to this end.

The very title of Mr. Dunn's book—*The Community and the Citizen*—is suggestive of the newer viewpoint. By "community" he means a group of people bound together by common interests and subject to common rules or laws. And any person, young or old, who shares in community benefits and is subject to community responsibilities is a "citizen." The home, the school, the church, the shop, the township, village, or city, the commonwealth, the nation—all are types of the community, and all who participate in the life of each community are its citizens.

Once the child comes to grasp this idea of citizenship in the large, he can easily be carried over to one particular type which we may term political citizenship, and the study of which we term civics. Somewhat crudely defined, civics is the study of man in his relation to his political environment —the state; and it includes both what the government does for him and what he may do in return, either individually or in organized groups.

Nature's gifts are free and unerring, while the community's gifts are the result of social sacrifice and are often blundering and faulty. Therefore, it is all the more important and difficult to teach the boy and girl to appraise these latter blessings rightly, and to be willing to contribute their share toward securing them. And we may add that one who is both willing and able so to contribute is the good citizen.

But now comes the vital point of this paper. The qualities of good citizenship cannot come from a mere accumulation of dry and more or less unrelated facts, nor from abstract generalizing about these facts: they must arise from a live, intelligent interest, which can be cultivated only by direct contact with community action—by enriching and capitalizing the child's own social experience.

Let us now consider a fairly definite program, especially for the elementary school, where the foundations must be laid for a structure that is to take a lifetime in the building of it. And this carries us back to the great master-builder, Froebel, and that wonderful educational tool, the kindergarten. Here a splendid start is made in bringing the child into a

sympathetic understanding of his social environment. The farmer, the carpenter, the blacksmith, all are friends, doing for him interesting services, which he sees, sings about, and imitates. This—for one or two blessed years! and then, he is "promoted" into the first grade, too often a desert waste where the real world disappears and the world of books takes its place!

By various means the idea of the interchange of services, acquired in the kindergarten, must be developed thruout the primary years. The child must come to see that in return for the specialized service his father or mother is rendering to society, the family is receiving—thru the medium of wages and salary—the services of grocer, milkman, doctor, teacher, preacher. And the child should be encouraged to talk about and appreciate the character of these services, and his family's dependence upon them. Even the pupil who comes to the rural school has a background of home experience to appeal to in enforcing this community idea.

During the first half of the grammar-school period the child is still reveling in the hero-worshiping stage—the idealizing of men and things. And just as this is the most valuable opportunity for taking the child thru the realm of European and American biography—carefully avoiding the complicated narrative history, for which he is not yet ready—so is it the time for helping him to understand, and hence to idealize, community service. This we may term biographical civics. In the cities, especially, there is a wealth of civic material, and even the small village is rich in such material, if the teacher has the instinct for discovering it. Realizing fully that the city of Philadelphia is unusually fortunate in this regard, and that each locality must solve the problem for itself—as some are already beginning to do—I shall venture to give a brief outline of what we are trying to accomplish in the practice school (grammar grades only) of the Philadelphia School of Pedagogy, and, also, in one of the high schools for girls. At least, our experience may be suggestive and stimulating.

Let me say, at the beginning, that this work in civics in our practice school is under the immediate direction of my competent assistant, Mr. E. W. Adams.

In the first half of the fifth grade a beginning is made with the child's common experiences within his home and his school. The topics taken up during the term (the order is not important) are: gas, electricity, water, sewage, and the telephone. And the method is about as follows, using the first topic, gas, as the illustration.

The teacher strikes a match and lights a gas-jet, looks at it a moment, and then turns it out. This bit of apparent idiocy catches the attention and excites the curiosity of the children to the *n*th degree, and this is exactly what the teacher is after. One question after another traces the gas into the ceiling, down the side walls to the basement, until the meter is reached. How to read the meter is then explained, by diagram if necessary, and the fugitive gas is traced into the street. The cover is then taken off

the street and behold! there is exposed a perfect network of pipes and wires. One particular pipe is followed till it enters a huge tank, and then the class has arrived (in its mind's eye) at the gas works. After a brief discussion of how the gas is manufactured, a visit to a convenient gas works is arranged for, and at the first class recitation after the trip interesting reports are made of what was seen and heard. Of course, this trip, like all the others taken by the class, is carefully planned by the teacher, and the sort of things to look for and inquire about are outlined with some care. A badly managed trip would be a waste of time, and bring the classwork into disrepute.

All the topics mentioned above are taught in substantially the same fashion, taking care to begin each new discussion with a contribution by the class from its own store of information, and following this up with the trip and the after-discussion. Of the five topics covered this first term, the telephone is the prime favorite. And the amount of accurate knowledge and experience the average fifth-grade class discloses in the preliminary discussion ought to convince any wide-awake teacher that the schoolroom has no monopoly of the educative process. Its function, at best, is and should be largely one of direction and guidance. When the service of the community to the child has been shown with each of the foregoing, the reciprocal duties of the child to the community are brought out by careful questioning, which follows the lines of the pupil's own observation and experience.

In the second half of the fifth grade, what the child sees by looking out the window is drawn upon for material: such as the policeman, the fireman, the street sweeper, the garbage collector, the ashes collector. Each of these is taken up in the manner already described, never omitting a possible trip or report or forgetting to emphasize the corresponding duties of citizenship resting upon the young citizens of the class.

During the early part of the sixth grade some of the educational institutions of the city are visited and reported upon: such as municipal playgrounds (in Philadelphia these are distinct from the school playgrounds), Fairmount Park, libraries, museums, historical buildings and localities. Later in the year visits are made to various public buildings, such as city hall, bourse, custom house, mint, armories and arsenals, hospitals. It must be kept in mind that not nearly all these trips are taken by the whole class, for this is obviously impossible, as well as unnecessary.

No regular textbooks are used in the fifth and sixth grades, but civics readers like Richman and Wallach's *Good Citizenship* and Hill's *Lessons for Junior Citizens* add interest to the work.

By the close of the sixth grade the pupils have acquired a fund of first-hand civic information and experience of a concrete and practical nature, no attempt having been made to generalize or to discuss political rights or duties from a legal standpoint. In fact, the word "government"

is not even mentioned: only the more general term "community." But during the seventh and eighth grades more attention can safely be given to the end and aim of governmental activity, and to the way in which public and private agencies unite to accomplish results. During the entire seventh grade the emphasis is placed on municipal government, using Philadelphia as the basis of comparison; while the eighth grade is shared about equally between commonwealth and national government, with the pupil's own state of Pennsylvania as the basis. However, this (to the child) artificial distinction between local, state, and national government is constantly broken over in the discussion of governmental activities, and is used only enough to impress the bothersome fact that there is such a threefold entity to be reckoned with.

No better introduction to the more serious study of civics (in the seventh grade) can be found for Philadelphia boys and girls than the beginnings and growth of community action in their home city, as pictured so graphically in Franklin's autobiography. They will see how various civic functions, such as street paving and cleaning, water supply, etc., at first performed by each householder, were gradually taken over by the municipality, and performed for all alike. The family and the home as factors in this community life are particularly dwelt upon, that the children may rightly appreciate the civic importance of the home.

A series of studies is next undertaken to find out how their city—aided by state or nation—helps the normal citizen in relation to life, health, property, working and business conditions, transportation, education, recreation, religious worship. And this is naturally followed by a brief study of how the city—again aided by larger political units—takes care of its subnormal citizens: the dependents, the defectives, and the delinquents. The idea of prevention is kept uppermost, or of restoration wherever possible. How the city gets the money to do all it does is briefly explained.

As each function is discussed, the organization of the city government to do this community work is outlined, with occasional reference to the ordinances of councils and to the Philadelphia charter. And careful consideration is given to the co-operation of private agencies with various municipal bureaus and departments, that the pupils may see how community and citizen work together. It is remarkable how the young lads are galvanized into alert, watchful guardians of their city's interests; quick to discriminate between good paving and bad, between clean streets and dirty ones, between law enforcement and law defiance. If this is not the basis of good citizenship, what is?

Very much the same plan is followed during the eighth grade, in dealing with state and nation. Time forbids my entering into detail. As various activities are taken up, the governmental organization is sketched in outline—executive, legislative, judicial—never forgetting to find out where the money comes from to keep the machinery going. In studying

about federal activities a beginning is made, wherever possible, at the point where nation and city find visible contact: e.g., the post-office, the custom house, the mint, the navy yard.

Of course, the touch has to be light during these last two years, or the young people would be weighed down with confusing details. The process of selection and adaptation by the teacher must be continuous and unsparing. But please observe this all-important point: the order followed is invariably that of the child's own interest and appreciation, namely, from function to structure, from the administrative department which does things, to the legislative which plans the things to be done, and the judicial which interprets and helps enforce those plans; and then, if necessary, to the charter or constitution which lays down legal powers and duties: never the reverse, as has so long been the custom. Moreover, the possibilities for co-operation between the community, acting thru government, and the citizens young or old, acting singly or thru voluntary associations, are never lost sight of.

I have tried to show that civics is not one or more gobs ("gob" is a perfectly good word—you will find it in the dictionary) of cold and indigestible facts, unrelated to life. Civics is itself a life—a growth—a point of view—democracy in the making! This means, first, that the work in civics must be given adequate time in the school curriculum; and second, that the work must be continuous, a little at a time, thruout the first eight years of school life.

With this as the foundation and substructure, what a splendid superstructure of effective citizenship can be erected during the high-school period, for the 20 per cent who are so fortunate as to reach the "people's college"! And this leads me to say something about the work in civics at the William Penn High School for Girls, Philadelphia, where, under the enthusiastic direction of Miss Jessie C. Evans, head of the department, the history has been socialized and the civics humanized. No more endurance tests for the memory on governmental anatomy, chiefly federal!

The brief time at the disposal of civics is taken up with a rather detailed study of the home city. After briefly tracing Philadelphia's growth as an organized community, the girls are directed into a most interesting study of the problems of health, sanitation, building regulations, water supply, sewage and garbage disposal, street cleaning, lighting, and paving, police and fire protection, transportation, education, city planning, contracts and franchises, municipal revenues.

Does this sound either formal or formidable? In practice it is neither. Let me quote from a description I gave of it in the *Saturday Evening Post*, about a year ago.

> No longer are the girls asked "elevating" questions such as: "How does the federal executive act as a check upon the legislature?" "What are the exclusive powers of the Senate and House of Representatives?" Instead, they are busying themselves with such

"commonplace" queries as: "Why do school children have to be quarantined when they have the mumps, and what are the city regulations covering contagious diseases generally?" "Why may there be legally only seven seats between aisles in our assembly hall, and what are the city ordinances about overcrowding, exits, and fire escapes?"

How dreadfully commonplace such subjects as these are! What a waste of time, when the pupils might be communing with that noblest product of political thinking, the federal Constitution! The trouble with this viewpoint—held, unfortunately, by some teachers—is that in the old Constitution days the girls did not commune, they revolted—in spirit, if not in action. On the other hand, they are taking a keen interest in this new type of civics. Starting with things that are vital to them, with questions they really want answered, they hunt anywhere and everywhere, even in the state or national constitutions, till their human interest is satisfied.

And this is not all. These girls become possessed by another motive—the true goal of the educational process. If they find that laws or ordinances passed for their protection are not enforced, or that further regulations are necessary, they feel a responsibility for the righting of these conditions. At last they have learned to think civically.

One girl, after studying housing conditions, went to call on her washerwoman to see what life was like in one of the city's worst inclosed courts. She was taken about the neighborhood and shown all the things the landlord ought to have done, but had not. "And the owner of the buildings is a good church member, too!" commented the girl, indignantly. How long will inclosed courts and narrow alleys and bad sanitary conditions prevail, once the citizens know the facts and learn to interpret those facts rightly? Even good church members will have to get busy if they are profiting in this unregenerate fashion.

A second pupil spoke of the added interest she had in reading the daily papers. Since she had been studying civics she felt acquainted with the various officials and their work, whereas before, the term "city controller," for instance, had meant nothing to her.

A third student had learned perhaps the most difficult lesson of all—the evil of indiscriminate giving, which pauperized the recipient of the bounty. How long, think you, will the gay and festive hobo continue in business once the backdoor "handouts" from generous but shortsighted women are stopped, and he is met by the unvarying rule, "No work—no eat"? This will have the proposed labor colonies beaten to a frazzle!

Just a few words in conclusion. I have tried to show that training in civics is training for intelligent, conscientious participation in community life; that to make such training effective it must not only be practical, but, like music and language itself, it must be continuous, it must be cumulative. The need for such training was never more urgent. One decade of rational civics teaching in our public schools, beginning with the home environment and reaching out into the wider problems of government, would put an end to boss rule in city, state, and nation. Boss rule is so costly and inefficient, and so utterly lacking in ideals, that the properly instructed taxpayer would not tolerate it for a year. Wherefore, it behooves us school men and women, who hold the key to the situation, in spite of tradition and the paralyzing fear of change that goes with it, to dare to unlock this door that leads to educational and social progress. We must come to recognize both the educational value of a piece of instruction based on interest rather than on compulsion, and the social value of a process of civic education that alone makes possible the success of that hardest of all political experiments, a true democracy.

THE ADVANCE MOVEMENT OF TEACHERS OF ENGLISH

JAMES FLEMING HOSIC, HEAD OF THE ENGLISH DEPARTMENT, CHICAGO NORMAL COLLEGE, CHICAGO, ILL., AND SECRETARY OF THE NATIONAL COUNCIL OF TEACHERS OF ENGLISH

New occasions teach new duties,
Time makes ancient good uncouth;
They must upward still and onward,
Who would keep abreast of truth.

Lowell's well-known lines perfectly express the spirit of the movement of which I speak tonight. For the English teachers of America are rapidly awakening to the new demands of the new day and will rise to meet them. Long noted for their vagaries, their disunion, each an infinitely repellent particle, they present today a fairly united front. They have formed one great brotherhood and eagerly call to each other from the South and North, and West and East: How goes the battle, fellow-struggler? How fare you in your assaults upon the fortresses of slovenly speech, and impotent thought, and ignorant taste?

Such a spectacle is most enheartening. For education in the mother-tongue remains and must always remain of transcendent importance to every child. It is necessary in order that he may think. It is necessary that he may make his thoughts known. It is necessary that he may share the thought and life of others. Any sign which augurs greater efficiency, a higher general level of instruction in English will be hailed by every man of judgment among us as due and ample cause for rejoicing. Not least happy are those who, being actually engaged in the work, see just before them larger possibilities of achievement, more and sounder fruit of their labors.

How does it happen that teachers of English, who only yesterday were notorious for vagary and disunion, should now be found united in one great brotherhood? What are their common purposes? What their common needs? We answer, they are actuated (1) by a sense of limitations which prevent the highest success and which must be overcome and (2) by a new and higher conception of their mission.

Upon no subject taught in the schools, particularly the high schools, has tradition hung more heavily than upon the subject of English. Originally no part of the curriculum for the adolescent years, it was introduced at the behest of higher institutions. Hence, from the beginning, it was treated from the point of view of preparation for the academic life. Moreover, being a language study, it must needs be pursued by those methods which had long been in vogue in the language field. "Here," said the schoolmaster, "is a body of knowledge, fully formulated, prepared for assimilation. Master it for your own." Unfortunately such a method was ill adapted to the study of a living tongue. Nevertheless, this method

has persisted, and it is only with the astonishing growth of the public high school that teachers and supervisors have become aroused to the necessity of sweeping aside this mass of pedantry and emphasizing in its place the essential language arts.

This has come about because the social has largely replaced the academic ideal. Formerly the schools fitted for college. Now, since not more than 4 per cent of those in high school ever go to college, the school very properly fits more directly for life. By life, it should be said, we mean the activities of business and industry, the associations of the family, the relationships and demands of the social community. Knowing that tomorrow his pupils may be in the midst of such responsibilities, that they will be hearing the call to service, that they must meet the test of efficiency, that they must prove their personal worth, that they should be able to find within themselves the possibility of the highest pleasures and of a deepening and broadening intellectual life, the English teacher will strive with all the earnestness that in him lies to make his classroom a place of generating power, of expanding capacity, of storing-up of resources against the day of need.

And what are the chief demands which life presses upon us? I answer, (1) a clear head, (2) the power of solving problems, (3) knowledge of self and of human nature, (4) ideals of conduct and strength to cling to them, (5) familiarity with the sources of culture, (6) standards of taste, (7) command of the vernacular. These, then, are the qualities and capabilities which the English teacher will seek to develop. Nor does any other have a better opportunity. First and always the student of English must think straight. How else shall he learn to speak persuasively or write with clearness; how else shall he read and get the sense? Problems, moreover, are not confined to mathematics. Every attempt to adapt certain means to a specific end is a problem-solving effort; likewise the discovery as in an argument, for example, of how another has done so. As for literature, it is the expression of human life, the embodiment of human nature. Thru it the heart is revealed and by means of it we live vicariously in a thousand experiences and situations not possible to us otherwise, finding ourselves more completely in a few hours of reading, it may be, than by years of actual toil and pleasure. Thus, too, are built up by concrete example images of what we should like to be and do and those strong feelings of attraction and repulsion which determine our course whenever moral issues confront us. Hence the sources of culture are found largely in libraries. It is the poets that shall teach us to respond with sympathetic fervor to the appeals of truth and beauty in that world of art and nature in which we may be privileged to move. Lastly, it is the supreme duty of the English teacher to enable his pupils to use effectively the language of every day. Thus we run the gamut, striking one by one the chief notes in the scale of life. English may sound them all.

Whether it does so or not will depend upon the teacher's point of view. If composition is taken to be a skillful treading among the eggs of our unphonetic English spelling, a judicious sowing of discourse with capitals, periods, and commas, and a successful dodging of the pitfalls of an elusive grammar—like Peter Bell's yellow primrose, nothing more—and if literature is treated as an opportunity for verbal inquisitions, untimely reference hunting, and petty pressing of noses against the author's private window-panes, then indeed shall the tones be few and harsh which the player will evoke. But if the better view obtain, that composition is thinking and that literature is life, the teacher will guide the activities of his class into those channels which lead directly into the experience beyond the school. Nor will he fail to exact the faithful performance of every essential detail, making the student feel how these contribute to the end he has in view.

This is why we hear so much nowadays of oral expression; of attempts to use the newspapers, the magazines, the newer books; of student criticism; of school papers; of interschool correspondence; of the acting of plays, and of various other departures from the beaten track. These are experiments in reality—attempts to direct boys and girls in doing precisely those things which they will most insistently continue to do all their days.

For the mere conning and saying of lessons is at best very like a treadmill, a performance not easily duplicated outside the school. It certainly does not enlist the whole-hearted earnestness of the pupil, and hence often signally fails to produce any deep or lasting effect. Boys and girls must enter into their speaking and reading with that zest and purpose which actuate them in their clubs and games. They must care to win, must study to win, must rejoice in winning. They will do so if their school life is real life. The resourceful teacher will make it so.

Such is the spirit which animates the leaders of the new English movement. They are not mere iconoclasts. They do not favor anarchy or welcome chaos. They are not unmindful of the values which the methods in vogue for several decades are capable of unfolding. They are not willfully ignoring the excellent traditions. But they would infuse the English work of the time with the best educational ideals of the time. They would keep abreast of progress, would walk in the van.

They are aware that conditions seemingly beyond their control render their task appallingly difficult. The country as a whole has indifferent standards of linguistic culture. Often there seem to be no standards at all. In many communities less than 10 per cent of the children may be said to receive any favorable linguistic or literary influence whatever in their homes, while on the street they are laughed at for their pains when they speak as in the school they have been taught to speak. The fathers read the newspapers and nothing better. The mothers read the lighter magazines or nothing at all. At the best, the school can never raise the English of all the boys and girls far above the community level, and that is often

painfully low. The wonder is, not that we do so badly in our English instruction, but that we produce any visible effects at all.

The situation in the school itself is not always favorable. Other departments fail to support by example and precept the efforts of the English teachers. The pupils are required to take too many hours of work and have not time for thoroness or ripening. The English teachers are overwhelmed with pupils and slight the work or destroy their health and energy in an heroic attempt to do justice to individuals where only mass instruction is possible. Actual statistics show that the mortality among composition teachers is in many instances actually greater than at the bloody field of Gettysburg. And yet it is a useless and unnecessary sacrifice! If the number of English teachers in the high schools of the United States were doubled, the total expense of this all-important subject would not far surpass that of the sciences, while if it were computed with relation to the actual time given to it, far less. No reasonable man will deny that the intolerable and unfortunate conditions to which I have referred could and should be removed.

The actual facts are at hand in the famous Hopkins report and will soon be given to the country. They should be urged upon the attention of all supervisors and all boards of education. For the sake of results, for the sake of precious human life and strength, they should be acted upon without delay.

Along these lines, then, lie the possibilities of advance in English teaching. A unity of purpose, reassuring in its depth and strength, seems to pervade our ranks. The social character and social activities of the school begin to bulk large in our conception of what English training may and ought to do. Not forgetting that life is more than meat and culture more than industry, to life itself we look for those aims which shall direct our efforts. Nor will we hope to work miracles and heal multitudes when we know quite well that upon each separate head must hands be laid.

We respect our high calling. Our land is one of many interests, many occupations, many religions, many races even. What shall constitute us all Americans? What, indeed, but pride in our common country, its history, and its free institutions; love of the Stars and Stripes which symbolizes them; knowledge of our common language by means of which we share the common life; and familiarity with our nation's literature, which reflects our history, which embodies our spirit, and disseminates our ideals. This language and this literature it is our privilege to teach. This we would do with an eye single to the making of competent and useful citizens, ready and able to serve others, and possessed of the means of ever widening and enriching their own intellectual lives.

THE HIGH SCHOOL AND DEMOCRACY

THOMAS JESSE JONES, SPECIALIST, BUREAU OF EDUCATION, WASHINGTON, D.C.

Society is now undergoing a very rapid process of evolution. Everywhere the insistent demand is for more democracy—democracy in government, including popular election of all officials and the subordination of government interest in war to government activity for soil, industry, health, and education; democracy in courts, judges who do not consider legal precedent and legal tradition more important than the welfare of the boy and the girl and more binding than the sacred ties of home life; democracy in industry, workshops in which the employee is more than a tool and the employer is always a brother; democracy of art, the beautiful and artistic of the world made common to all and the common in life transfigured in art for its very simplicity and universality; democracy of recreation, buildings and open parks in our cities for the laughter and the pleasure and the play of all the people, and for farmers and laborers of the open country liberal allowances of regular time for healthful fun and joyful appreciation of nature's handiwork; democracy of health, God's fresh air and pure food for the children of all men and a death-rate that draws no unfair line against the infants of the laborers; and most important of all, a demand for a democracy of education.

Democracy of education is just beginning to be realized. As to the classes of people who shall receive education, we have long been democratic. Civilized people are now almost unanimous in their belief that all the people must be educated. While, however, we have proclaimed with almost boastful pride our belief in the education of all the people, we have been clinging with blind tenacity to a form of education that is both traditional and aristocratic. The subject-matter of education has been largely the conventional knowledge demanded by a people who had more leisure than responsibility. We have been content to accept this decorative or "disciplinary" idea of education devised for the independent classes of a very simple form of society now practically out of existence.

The high school has now the opportunity of the century to lead in the great tide of democratization now moving as never before. It can, if it will, not only lead the school system, but it can guide and direct more largely than any other social group every phase of democracy as it reaches out into the home, the church, the playground, the field, the shop, and the legislation halls. This tremendous possibility is claimed for the high schools of the land because of their strategic position in our civilization.

What then are the educational elements which the high school must recognize if it would live up to its wonderful opportunity to assist in the great movement for a real and active democracy in education and in life?

First of all, teachers must catch the spirit of the twentieth-century democracy and learn of the great movements for the improvement of man-

kind. They must know enough of the ills of our democracy to feel a righteous and intelligent indignation that so fair a land should be so easily beset with difficulties. They must know, too, the inspiring crusades of public-spirited men, rich and poor, to rid the land of these evils and to make it a land fair in reality as in name.

Why must the nation suffer the appalling loss of 650,000 persons every year from preventable causes? A multitude of men, women, and children, almost twice the population of the capital city of our nation, practically thrown away with scarcely a tinge of regret from even the best-educated people of the land! Why should the electrocution of a miserable murderer attract the attention of the public more than the death of 300,000 infants every year from preventable causes? Is it not possible to improve conditions causing a divorce rate of one in twelve marriages in the United States as compared with a rate in France of only one in thirty marriages and in Germany of but one divorce in forty-four marriages? Shameful housing conditions of the working classes, the prevalence of poverty, the number of youthful lawbreakers, the impulsive radicalism of mob rule, the selfish conservation of tradition and privilege, the reckless destruction of the natural resources to swell the fortunes of the few, the depopulation of rural areas and the increasing congestion of the cities—all these are the call of society for a universal democracy. They call to the teachers of the land, and above all to the high-school teachers.

Likewise do the great crusades for human betterment call to the public schools. The national and international organizations for the study and prevention of disease; the conservation congresses to save the soil and the forests and the minerals and the waterfalls and the animal life; the progress of political rights and social justice so rapid as to be almost revolutionary—these and many more inspiring efforts for humanity await the foundation work of the teacher, for it is only the school that has the machinery for teaching "all the children of all the people," that it is wiser to correct the sanitary condition than to spend the energy in healing preventable sickness; that it is wasteful to build strong jails and permit the saloon, the brothel, and the gambling-den to flourish; that the most effective foes of poverty are not the almsgivers but the schools preparing the boys and girls as workers in the shop, in the field, but most important of all as fathers and mothers in the home and as patriots in their community.

The church some time ago tried to save itself by what it called the institutional church, but it was soon found that church kitchens and gymnasiums and nurseries and recreation rooms are not enough. These are but the machinery—good in their place, but by themselves ineffective. The church needs men and women filled with the spirit of service; the school needs teachers imbued with the spirit of democracy. I am pleading for an attitude of mind and will and not for a program. The great discovery of democracy will be made by the individual teacher when he or she approaches

the task in the spirit which dominates the scientific discoveries of the nineteenth and twentieth centuries. It is the willingness to learn everyone and everything. It is the proper valuation of the small things of life. The inductive method of approach weighs every particle of evidence whether small or great. Dr. Trudeau is checking the ravages of the great "white plague" because he was open-minded enough to appreciate the value of such simple elements as fresh air and pure food. Dr. Knapp became the benefactor of southern agriculture because he was wise enough to see that the boll weevil could best be combated, not by chemicals, but by old-fashioned thrifty farming with deep plowing and early cultivation.

The most impressive commencement exercise that I have ever witnessed was that of a farmer boy at Tuskegee last May. He stood upon the platform of the beautiful church surrounded by the common tools and the common animals and common foods without which we could not live. There were the stove, the bed, and the table; the plow, the spade, and the hoe; the saw, the hammer, and the plane; the horse, the cow, and the pig. Surrounded by these evidences of a democratic education, he stood erect, a splendid specimen of young manhood entirely unconscious of his uniform —the simple blue overalls of a farmer. He explained in dignified clear English a scientific chart showing exactly how to obtain the greatest possible returns from an acre of soil and still leave that soil ready for other crops. It was all most interesting and impressive, but to me the climax of his splendid efforts came when quite unconsciously he lifted from the platform a box containing what he described to be the farmer's best ally. His simple words were eloquent with meaning as he showed that out of that *box of barnyard manure* came prosperity and comforts and pleasures and education and religion to the man who is democratic enough to recognize its value. Those are not meaningless words which Christ spoke when he said, "Blessed are the meek for they shall inherit the earth."

And now let us imagine the teacher all a-tremble with the spirit of democracy; awed it may be by the responsibility; humble in the search for truth; but eager and ready to do and to dare whatever her hands or her mind or her soul may find to do. Again we warn that she is not to reform the world nor her community nor yet her pupils; she is not to await big buildings or elaborate plans; she is not even to obey all of the commandments herein urged. In the humble spirit of science and democracy, she is first of all to consider well her community and her pupils. No part of the life of the pupil and no section of the community must be despised. The vocational outlook of the pupils, their homes, their recreations, their health, their morals, their disposition must be carefully considered from every possible angle which the time, energy, and ability of the teacher will permit. Likewise there must be a study of the natural resources of the community, the human groupings, the roads, the sanitary arrangements, the pleasure centers, the schools, the churches, and the industries.

Second, the school and its teachers must agree to adapt every study and every activity of pupil, school, and teacher to the improvement of the conditions which their community study has revealed. Any study or portion of study, any activity or school machinery not contributing rather directly to social welfare of pupil and community must be omitted. An honest application of this test to the present high-school courses would work many much-needed improvements.

If Miss Smith, teacher of Latin, wishes really to help direct the great wave of democracy, she must follow Mary to her mother's home and see the mother battling bravely to feed, clothe, and educate her family of five children and father and mother on ten or fifteen dollars a week. She must learn what is Mary's attitude toward her hard-working father and mother. She must ascertain Mary's pleasures and evening companions. She must study the relation of housing and food to the death of Mary's baby brother. She must determine in her own mind and, if possible, help Mary to determine what useful sphere in life Mary is going to fill. These various excursions into Mary's life will probably lead Miss Smith to the study of her community and she will learn why the health officer does or does not know that William had diphtheria, why a city of 17,000 has no sewerage system, why their typhoid fever death list is twice what it ought to be, why there are so many beautiful homes, why the schools are so well constructed, and many other conditions good and bad of which she had not dreamt. Finally at the end of the school year when her mind is full of this living information, Miss Smith, the Latin teacher, will decide to teach Latin in such a living style that it can no longer be called a dead language, or she will throw Latin overboard and teach another subject which Mary needs more in her daily contact with a mother who slaves all day, with children who need to be fed and clothed and washed, in a city that does not give anything away, in a democracy that only asks a man or woman to produce something useful, whether it is of matter, mind, or spirit.

In a word, the high-school teacher who would grasp the greatest opportunity for social service now open to any person must realize that education in life and that every activity in the high school must be an integral part of life.

DEPARTMENT OF SUPERINTENDENCE

PHILADELPHIA MEETING, FEBRUARY 26–28, 1913

SECRETARY'S MINUTES

FIRST DAY

MORNING SESSION—WEDNESDAY, FEBRUARY 26, 1913

The Department of Superintendence of the National Education Association met in the Ballroom of the Bellevue-Stratford Hotel, Philadelphia, Pa., at 9:30 A.M., President Franklin B. Dyer, superintendent of schools, Boston, Mass., presiding.

The session opened with an invocation by Rev. Floyd W. Tomkins, rector of Holy Trinity Church.

Addresses of welcome were made by Rudolph Blankenburg, mayor of Philadelphia, Mrs. Blankenburg, and Martin G. Brumbaugh, superintendent of schools, Philadelphia, Pa., to which response was made by O. T. Corson, editor, *Ohio Educational Monthly*, Columbus, Ohio.

The program of the morning session was as follows:

1. "Team Play between Schoolmaster and Layman"—C. A. Prosser, secretary, National Society for the Promotion of Industrial Education, New York, N.Y.
2. "Team Play between City Superintendent and City"—C. P. Cary, state superintendent of public instruction, Madison, Wis.
3. "Team Play within the System"—Paul W. Horn, superintendent of public schools, Houston, Tex.

At the close of the morning session the president appointed the following committees:

COMMITTEE ON NOMINATIONS

Guy Potter Benton, president, University of Vermont, Burlington, Vt.
S. L. Heeter, superintendent of schools, Pittsburg, Pa.
L. D. Harvey, president, Stout Institute, Menomonie, Wis.
Robert H. Wright, president, East Carolina Teachers Training School, Greenville, N.C.
George B. Cook, state superintendent of public instruction, Little Rock, Ark.

COMMITTEE ON RESOLUTIONS

J. H. Francis, superintendent of schools, Los Angeles, Cal.
J. H. Phillips, superintendent of schools, Birmingham, Ala.
W. McK. Vance, superintendent of public schools, Delaware, Ohio.
John W. Carr, superintendent of schools, Bayonne, N.J.
Payson Smith, state superintendent of public schools, Augusta, Me.
W. S. Sutton, University of Texas, Austin, Tex.

AFTERNOON SESSION

The meeting was called to order at 2:00 P.M. in the Ballroom of the Bellevue-Stratford Hotel by President Dyer, and the following program was presented:

1. "Uniformity of Standards in School Administration"—Thomas E. Finegan, third assistant commissioner of education of the state of New York, Albany, N.Y.
2. "The Uniform Minimum Curriculum with Uniform Examinations"—Frank M. McMurry, professor of elementary education, Teachers College, Columbia University, New York, N.Y.

Discussion: A. B. Poland, superintendent of schools, Newark, N.J.; E. C. Moore, professor of education, Yale University, New Haven, Conn.; Ella Flagg Young, superintendent of schools, Chicago, Ill.; I. B. Bush, superintendent of city schools, Parkersburg, W.Va.; Edward C. Elliott, professor of education, University of Wisconsin, Madison, Wis.

EVENING SESSION

After music by an orchestra and a brass band composed of boys from the Philadelphia high schools, President Dyer called the meeting to order at 8:00 P.M. in the Assembly Hall of the William Penn High School, and the following program was presented:

1. "Developing the Co-operation and Initiative of Teachers"—Charles H. Judd, director, School of Education, University of Chicago, Chicago, Ill.
2. "The Need to Dream"—Joseph Lee, member of the school committee, Boston, Mass.
3. "The Unmeasurable in Teaching"—Nathan C. Schaeffer, state superintendent of public instruction, Harrisburg, Pa.
4. "Attainable Ideals"—Philander P. Claxton, United States commissioner of education, Washington, D.C.

SECOND DAY

MORNING SESSION—THURSDAY, FEBRUARY 27, 1913

President Dyer called the meeting to order at 9:30 A.M. in the Ballroom of the Bellevue-Stratford Hotel. Samuel Hamilton, superintendent of county schools, Wilkinsburg, Pa., was called to the chair, and the following program was presented:

Topic: Some Experiments in School Systems and Their Outcome

1. "Developing a School System"—C. S. Meek, superintendent of schools, Boise, Idaho.
2. "School Credit for Home Industrial Work"—L. R. Alderman, state superintendent of public instruction, Salem, Ore.
3. "The Home School—An Experiment in Household Education"—Randall J. Condon, superintendent of schools, Cincinnati, Ohio.
4. "The Larger Use of the School Plant for School Purposes"—J. H. Francis, superintendent of schools, Los Angeles, Cal.
5. "The Cincinnati Continuation Schools"—Edward D. Roberts, assistant superintendent of schools, Cincinnati, Ohio.

The annual business meeting followed the program.

On resuming the chair, President Dyer called for the report of the Committee on Nominations. L. D. Harvey, president, Stout Institute, Menomonie, Wis., chairman of the committee, submitted the following report:

For *President*—Ben Blewett, superintendent of instruction, public schools, St. Louis, Mo.
For *First Vice-President*—W. E. Ranger, state commissioner of public schools, Providence, R.I.
For *Second Vice-President*—A. S. Cook, superintendent of Baltimore county schools, Towson, Md.
For *Secretary*—Anna E. Logan, Ohio State Normal School, Oxford, Ohio.

On motion of the chairman, the report of the committee was adopted and the secretary instructed to cast the unanimous ballot of the department for the persons named for the various positions. This was done and the persons named were declared duly elected.

Invitations to hold the meeting of the department for the year 1914 were presented from Palm Beach, Fla.; Chicago, Ill.; Cincinnati, Ohio; Memphis, Tenn.; Milwaukee, Wis.; and Richmond, Va. The first ballot resulted as follows: Palm Beach, 103; Chicago, 72; Cincinnati, 187; Memphis, 28; Richmond, 287. By vote of the department, the choice in the next ballot was confined to Cincinnati and Richmond. Before the ballot

was completed, Cincinnati was withdrawn, and Richmond was declared to be the place of meeting for 1914.

AFTERNOON SESSION

The afternoon session was given to round-table conferences, as follows:

(A) ROUND TABLE OF SUPERINTENDENTS OF LARGER CITIES

Chairman—Andrew W. Edson, associate city superintendent of schools, New York, N.Y.

1. "How to Measure the Efficiency of Teachers"—W. M. Davidson, superintendent of schools, Washington, D.C.; and Ben Blewett, superintendent of instruction, public schools, St. Louis, Mo.
2. "Differentiation in the Courses of Study for Children between Twelve and Sixteen Years of Age"—C. E. Chadsey, superintendent of schools, Detroit, Mich.; and S. L. Heeter, superintendent of schools, Pittsburg, Pa.

(B) ROUND TABLE OF SUPERINTENDENTS OF SMALLER CITIES

Chairman—Ellis U. Graff, superintendent of schools, Omaha, Nebr.

Topic: The Most Efficient Service Which Assistant Superintendents or Supervisors Can Render

1. "The Relation of Supervisory Assistants to the Superintendent"—Milton C. Potter, superintendent of schools, St. Paul, Minn.; and J. J. Keyes, superintendent of public schools, Nashville, Tenn.
2. "How Can Supervisors and Assistant Superintendents Render the Most Efficient Service in Their Relations to Principals and Teachers"—Frederick M. Hunter, superintendent of schools, Lincoln, Nebr.; and Bettie A. Dutton, principal, Kentucky Street School, Cleveland, Ohio.
3. "The Selection and Tenure of Office of Assistant Superintendents and Supervisors"—J. M. Gwinn, superintendent of schools, New Orleans, La.; and M. G. Clark, superintendent of city schools, Sioux City, Iowa.

(C) ROUND TABLE OF STATE AND COUNTY SUPERINTENDENTS

Chairman—Francis G. Blair, state superintendent of public instruction, Springfield, Ill.

Topic 1: The Best Form of National Aid to State Systems of Instruction

1. "From the Viewpoint of the National Commissioner"—P. P. Claxton, United States commissioner of education, Washington, D.C.
2. "From the Viewpoint of a State Commissioner"—C. G. Schulz, state superintendent of public instruction, St. Paul, Minn.
3. "From the Viewpoint of a County Superintendent"—E. M. Rapp, superintendent of Berks County schools, Reading, Pa.

Topic 2: The Best Method of Apportioning and Administering State Aid

A paper on this topic was presented by David Snedden, commissioner of education for Massachusetts, Boston, Mass.

EVENING SESSION

The meeting was called to order by President Dyer at 8:00 P.M. in the Metropolitan Opera House.

After music by a glee club from the Philadelphia high schools, an address of welcome was given by the president of the Philadelphia Teachers' Association, Louise M. Haeseler, to which President Dyer responded.

The following program was presented:

1. "The Mechanical Mind"—John Grier Hibben, president, Princeton University, Princeton, N.J.
2. "The Heart of the Educational Problem"—Mrs. Mary C. C. Bradford, state superintendent of public instruction, Denver, Colo.
3. "The Reaction in College Education"—Alexander Meikeljohn, president, Amherst College, Amherst, Mass.

THIRD DAY

MORNING SESSION—FRIDAY, FEBRUARY 28, 1913

The session took the form of a joint meeting with the National Council of Education and was called to order at 9:30 A.M. in the Ballroom of the Bellevue-Stratford Hotel. President Charles H. Keyes of the National Council presided, and the following program was given:

Topic: Reports of Committees on Education

1. "Reports on Grammatical Nomenclature"—C. R. Rounds, West Division High School, Milwaukee, Wis.; and William G. Hale, head of the Department of Latin, University of Chicago, Chicago, Ill.

2. "Summary of the Report of the Committee on Teachers' Salaries and Cost of Living"—Robert C. Brooks, Swarthmore College, Swarthmore, Pa.

3. "Economy of Time in Elementary Education":

a) "A Report on Progress by the Committee on Economy of Time in Elementary and Secondary Education"—H. B. Wilson, superintendent of city schools, Decatur, Ill.

b) "Some Los Angeles Experiments"—J. H. Francis, superintendent of schools, Los Angeles, Cal.

c) "A Seven-Year Elementary School"—Charles H. Judd, director, School of Education, University of Chicago, Chicago, Ill.

d) "Mobility of the Teaching Population in Relation to Economy of Time"—Lotus D. Coffman, professor of education, University of Illinois, Urbana, Ill.

e) "The Economy of Time thru Testing the Course of Study and Time Allotment"—Leonard P. Ayres, associate director, Department of Child Hygiene, Russell Sage Foundation, New York, N.Y.

At this time, Superintendent C. E. Chadsey, of Detroit, made the following motion:

I move the continuance of the Committee on Economy of Time in Elementary Education for another year, and that it may be enabled to continue its work on the problem in a thoro and extensive way. I move that this department request the National Council of Education to recommend to the Committee on Investigations and Appropriations the setting apart of $500.00 to meet the necessary expenses of this committee.

This motion was adopted.

President Dyer now resumed the chair and called for the report of the Committee on Resolutions. The following report was presented by Superintendent J. H. Francis, of Los Angeles, chairman of the committee:

We, your Committee on Resolutions, beg to submit the following report:

1. *Resolved*, That the Department of Superintendence of the National Education Association recognizes the vital importance of raising the efficiency of the rural schools and strongly urges their supervision by expert, non-political county or district superintendents appointed by non-political educational boards or commissions.

2. *Resolved*, That we favor the continued agitation, discussion, development, and extension of industrial, agricultural, and vocational training and guidance for both boys and girls in the schools of this country, and believe such work should have the encouragement and financial support of national, state, and local governments.

3. *Resolved*, That we indorse differentiation in courses of study in the last two years of grammar-school work.

4. *Resolved*, That we hold the logical and sane education for the American girl of the twentieth century to be fully as important as is that for the twentieth-century boy, and believe that the making of courses of study to meet her special needs is of sufficient importance to enlist the best thought and effort of the most earnest and efficient school men and women of our day.

5. *Resolved*, That we advocate the wider use of the school plant for educational, social, and civic purposes up to the point of diminishing returns.

6. *Resolved*, That we believe there is urgent need for fuller development and better support of night and vacation schools.

7. *Resolved*, That we urge our national Congress to give the fullest possible recognition of, and financial support to, the Bureau of Education now doing such excellent work under the supervision of Commissioner Claxton.

8. *Resolved*, That we recommend expert surveys and investigations of school systems as helpful and valuable, when made by broad-minded, constructive committees, inspired

by right educational motives, working under properly constituted authority, and wholly free from commercialism.

9. *Resolved*, That we commend the action of the Department of Superintendence in appointing a Committee on Economy of Time in Elementary Education, and recommend the continuance of such committee with adequate financial support to prosecute its work.

10. *Resolved*, That while we believe uniformity in clerical, administrative, and business phases of school work would increase efficiency, we advocate such liberality and diversity in strictly educational phases as to encourage initiative upon the part of superintendents, principals, and teachers in studying their particular problems and in providing for the complex and varied needs of individual pupils and communities.

11. *Resolved*, That the educational interests of this country are under deep obligation to President Dyer and his coworkers for the broad, comprehensive, truly educational and inspirational program of this, one of the best meetings in the history of the organization.

12. *Resolved*, That we express our sincerest thanks for the genuine courtesy and hospitality extended to the school people of the nation by Superintendent Brumbaugh, the committees, and other citizens of Philadelphia.

13. *Resolved*, That, recognizing the tremendous power of the press in molding public opinion, we regard with deepest appreciation the publicity given by the newspapers of Philadelphia to the affairs of this meeting.

Respectfully submitted,

J. H. Francis, of California
J. W. Carr, of New Jersey
W. S. Sutton, of Texas
J. H. Phillips, of Alabama
W. M. Vance, of Ohio
Committee

The report was unanimously adopted.

Edward Hyatt, state superintendent of public instruction, Sacramento, Cal., presented a set of resolutions adopted by the legislature of California calling upon Congress to aid public schools and the National Bureau of Education. The resolution was amended so as to exclude the word "California" and by vote of the department referred to the Committee on Resolutions.

AFTERNOON SESSION

The meeting was called to order at 2:00 P. M. in the Ballroom of the Bellevue-Stratford Hotel, President Dyer presiding.

The following program was given:

Topic: Improving School Systems by Scientific Management

1. "Underlying Principles"—Paul H. Hanus, professor of education, Harvard University, Cambridge, Mass.
2. "Their Application"—F. E. Spaulding, superintendent of Newton schools, Newtonville, Mass.
3. "Investigation Instruction"—W. C. Bagley, director, School of Education, University of Illinois, Urbana, Ill.
4. "The Determination of the Relative Value of Details within the Course of Study"—A. D. Yocum, professor of pedagogy, University of Pennsylvania, Philadelphia, Pa.

At the conclusion of the program, Walter D. Hood, principal of Gilbert High School, Winsted, Conn., offered the following resolution:

Resolved, That the Department of Superintendence appoint a committee on the United States Bureau of Education, and that this committee co-operate with the Commissioner of Education in his efforts to secure adequate support for the bureau and an enlargement of its activities.

The resolution was duly seconded and carried by unanimous vote.

After introducing President-elect Ben Blewett, of St. Louis, President Dyer declared the meeting of the department adjourned.

B. W. Torreyson, *Secretary*

PAPERS AND DISCUSSIONS

ADDRESS OF WELCOME

RUDOLPH BLANKENBURG, MAYOR, PHILADELPHIA, PA.

At all times it is a great pleasure for me, acting as chief magistrate of Philadelphia, to extend a heartfelt welcome to gatherings of men and women associated for the purpose of bettering conditions in the Republic and maintaining or elevating the ideals of the people. But in welcoming this great Department of Superintendence in its individual capacity, and as representative of the National Education Association of the United States, it is a special privilege to stand face to face with a great formative force in the Republic.

The impression that your meeting has substantial claim to the special consideration of the citizenship of Philadelphia rests upon two reasons: First, your organization stands for leadership in the greatest guiding force known to modern times—education, as it influences and directs the destiny of 95,000,000 free people. Second, you come to the mother-city of the Republic, to the birthplace of the Declaration of Independence, in a militant spirit. You realize that to be eternally free we must be eternally vigilant. You have faith in your own ability and your own sincerity of purpose to provide for the future of your pupils those educational sinews of war that will be their safeguard and guide in the stress and strain of life.

The fathers of our country won independence because they had an intelligent idea of their rights and their needs and a wise and effective plan whereby they could be obtained and satisfied. You meet in the spirit of the founders of the Republic; you realize changed conditions; you know that we have outgrown much that, in times past, was regarded as suitable and satisfactory, and that the duty rests upon each individual, whether within or without your association, to investigate fearlessly, to advocate needed changes energetically, but, with equal energy, to defend old practices, if old practices prove in line with new ideas.

If I would leave any particular thought with you, aside from the expression that you are doubly welcome to the city which has been the mother of universities as well as of liberties, that thought would be that our public schools are the finest, most profitable investment that a people can make—an investment which has already declared untold dividends, not only in a better type of citizenship, but thru an intelligently directed industrial development which has added to the wealth of the nation a hundred fold the nation's investment in education.

It is from my heart, and in all sincerity, therefore, that I welcome you to Philadelphia; welcome you as an echo of that splendid spirit which characterized the men of 1776, men who dreamed dreams, saw visions—

dreams and visions which have come true. You are the representatives of an irresistible power in the nation which makes for increased comfort, greater wealth, and higher ideals, and for a more symmetrical development in the social, political, and economic life of the Republic.

ADDRESS OF WELCOME

M. G. BRUMBAUGH, SUPERINTENDENT OF SCHOOLS, PHILADELPHIA, PA.

On Tuesday, February 24, 1891, just twenty-two years ago, this department met in this city, the city in which the National Education Association had its birth more than half a century ago, and Hon. Andrew S. Draper, then as now superintendent of the schools of the Empire State, presided over its sessions, receiving at its closing session a rising vote of thanks for his "prompt, efficient, and every way satisfactory" services.

Since that time this great educational body has passed to and fro upon the face of the earth but has not until now returned to the city which then entertained the department "with a cordiality and a warmth of hospitality almost, if not quite, unprecedented." You have been good enough again to meet amid "the inspiring surroundings in this historic place," and to test anew the hospitality of the great city of homes and of hearts aglow with welcome. We trust and believe that your visit here will be as rich in pleasure to you as we know it will be in profit to us.

This city has been from its founding a center of education and of culture. Its pious founder, William Penn, was a firm believer in universal education, and made provision for its accomplishment equal if not superior to that of any other colony. Before the commonwealth was created, or ever the Declaration of Independence or the federal Constitution had been framed and promulgated in this city, here lived and taught some of the greatest educators of colonial America. Here in 1770 Christopher Dock's *Schul-Ordnung* was published, the first American treatise on education; to be followed in a generation by Neef's *Exposition of Pestalozzian Methods*, the second American treatise on education. Here was founded the first American school of medicine, now a part of the great University of Pennsylvania. There is no part nor parcel of our soil that is not rich in the history of educational endeavor. Pennsylvania has recently enacted the most important, comprehensive, and progressive school code that ever was enacted by any sovereign state. Philadelphia, under this code, is rapidly approximating a position of commanding importance in the promulgation of the doctrine that "the alphabet is the ally of liberty, and in the accurate account of the forces that have made America, the public school must stand first."

We would not be unmindful of the fact that the school of our childhood is frequently regarded as the basis of criticism of the school of today.

The school must always be a reflex of community purposes and activities. As the community changes, the school must change. The real test of a school system is not its passive adjustment to community standards, but its active advocacy in the community of such standards of life as will make the school easily the champion of all that is best in the great economic, social, and civic atmosphere in which its pupils must live and grow. The schoolmaster of today, like the ancient watchman on the tower, is always looking with sympathetic and unprejudiced eye over the whole activity of a people to see here and there signs of hopeful advance in the better care and culture of a community. He then turns his whole endeavor to the incorporation of this into the forces at work in the school.

This criticism usually takes the form of a protest against the many-sided activities in the school. The argument is made that we no longer fit the child for some specific endeavor. The school welcomes this protest. We do not profess to define the life-careers of our pupils. We do not intend to segregate the school's individual units and by distinctive training limit each in his endeavor to participate freely and broadly in the whole industrial endeavor of the community. We need in America not only trained workmen, but, quite as well, happy, contented workmen. We shall not rise to industrial supremacy until we have given to our pupils not only an understanding of specific industrial problems, but that wider and vastly more significant equipment which will enable them to sense the relative value and meaning of things about them and easily to find a place in the social, civic, and economic environment into which they must enter. The versatility of the mind is quite as important as the content of the mind. The fundamental qualities of honesty, promptness, neatness, courtesy, and dependableness are quite as much an equipment for an industrial career as is a knowledge of tools or the quotations of the market.

Moreover, with the tendency well established to shorten the vocational hours of our people, there arises increasing need for an education that will fit people for their avocational hours. It is just as important, in the last summing-up of the effectiveness of a citizen, that he should know how to spend his leisure profitably as it is that he should work acceptably. Likewise, it is not to be disputed that the child should carry into his mature activities a body that is trained and conserved and is physically fit to carry the stress and strain of his years of toil.

For these reasons, the school widens its scope, broadens its enterprise, deepens its nutritional and suggestive values, and becomes in the last analysis a fitting-place for life. Nothing that bears specifically upon the vocational or recreational interests of a community is without significance and meaning in the scope and purpose of the school.

In passing to this newer concept of its function, the school is not unmindful of the fact that it is not and cannot be the sole agency at work in making a stable citizenship for the Republic. We do not wish the school to be a

day nursery. We do not believe it is the sole moral corrective of society. We emphatically desire such a return to the simple responsibilities which Divine Wisdom has placed upon parenthood as to make the home with the school equally efficient in the equipment of the individual for life. We ask that the child in our school shall have a home life and a church life as rich in nutrition for the growing soul as modern wisdom can devise, to the end that these three great agencies, working in harmony, may give to us the finest type of citizen that we can vision.

In planning for such ideals you are the nation's leaders. We are confident that your wisdom and experience will give point and purpose to this great convention. Philadelphia is, indeed, happy to welcome you, and rejoices that yours is the opportunity to give impetus and direction to that system of training which best fits our pupils to live and which best tends "to purify and to perpetuate the American republic"—the free American public school.

RESPONSE TO ADDRESSES OF WELCOME

O. T. CORSON, EDITOR, "OHIO EDUCATIONAL MONTHLY," COLUMBUS, OHIO

I thank you, Mr. President, for the privilege of representing the members of this association in an expression of appreciation of the opportunity which we enjoy of meeting in this historic city, the birthplace of our independence and national life. For a year we have been looking forward to this hour with the most pleasant anticipations, and we assure you, Mr. Mayor and Mr. Superintendent, that these anticipations are already more than realized in the cordial welcome which you have extended, and which we are certain finds a grateful response in the hearts of all who are present. We sincerely thank you for your gracious words which make us all feel at home in this "City of Brotherly Love."

In this city, so full of historic interest, there are many hallowed spots, around which cluster many sacred memories, which appeal with peculiar force to the minds and hearts of all who are connected with the great work of public education, and who believe that it is the great mission of the public school to train a citizenship worthy of the heritage which has come down to it from the past. Here in this city the patriots of 1776 declared to the world their conviction that it is self-evident that all men are created equal and endowed with certain inalienable rights including life, liberty, and the pursuit of happiness. Today we here express our conviction that the public school represents America's one serious attempt to make valid the Declaration of 1776; for the public school is the one place in all the world where there is found absolute equality of opportunity to all, regardless of conditions of birth; the one place where "jeans and broadcloth have to rub up together"; where wealth and ancestry count for nothing in

themselves; but where brains and character and hard work are certain to win the recognition they merit.

In the public school the rights of the child are carefully guarded, his physical, mental, and moral life conscientiously conserved, and his liberty made possible and permanent by a training which teaches him to obey wholesome authority, kindly and firmly exercised, and to recognize the rights of others—a training which is absolutely essential to anyone who is ever either to pursue or to possess happiness.

The real worth of an institution can usually be determined by the demands made upon it by its appreciative friends, and the fault found with it by its unfriendly critics. Judged by this standard, the greatness of the public school is pre-eminent in American life.

On the one hand, there seems to be no limit to the demands made upon the school by the people, in whose appreciation and regard it stands next to the home, and the miracle of the age is the readiness with which the school responds to these ever-increasing demands, and meets the ever-changing needs of our modern life.

On the other hand, there is no limit to the unfair, unjust, unreasonable, and untrue criticism of the school made by persons whose ignorance misleads them to wrong conclusions, or whose prejudice blinds them to the plainest facts.

Some of this criticism comes from parents, who pay an unconscious and unintentional tribute to the teacher by their complaint of her success in securing such obedience and behavior on the part of their own children as they themselves have never been able to attain in the home.

Then there is the wholesale denunciation of the work of the public school, and its condemnation as a failure by papers and magazines of the *Ladies Home Journal* type. Such criticism is sometimes the result of ignorance or prejudice, but there is strong temptation at times to think that it may be a part of a business policy, both keen and conscienceless, which recognizes that increased revenues may result from sensational attacks upon an institution dear to the hearts of the people.

These attacks usually include the statement that the percentage of pupils attending the high school is so small as to be insignificant. This statement has been proven many times to be absolutely false and misleading.

Several years since, the late Hon. Frank Hill, at the time secretary of the Massachusetts State Board of Education, conclusively answered this false statement with his concrete illustration of an imaginary school with ideally perfect attendance and results. This imaginary school had the usual twelve years' course of study with one hundred pupils entering each year in regular succession, all remaining regularly in school and passing to an advanced grade at the end of each year. It is evident that in such a school at the end of twelve years there would be an enrollment of twelve

hundred pupils, with four hundred in the high school, and one hundred in the graduating class.

Anyone who can understand "figures which do not lie" knows that the high-school attendance in this imaginary school is perfect, or 100 per cent, and that all of the pupils, or 100 per cent, are graduating from the high school in due time. But the "liars who figure" tell us that only one pupil in every three in this imaginary school ever reaches the high school, and only one in twelve graduates therefrom, and, therefore, the public school is a failure.

Persons who persist in making such false statements must be either "mental defectives" or "moral deviates," and should be carefully examined by some expert clinician who can recommend suitable treatment, provided their cases are not of the hopeless, incurable variety.

Again, some of the most inexcusable criticism of the work of the public schools comes from the "men higher up" in the educational world, who tell us that the "greatest failure of the nineteenth century is public education," that "the school is a momentous failure," that the "lives of children are being wasted," etc. It is encouraging to note that some of these critics are showing signs of repentance by hastening to explain that they did not mean all that they said when they made these statements. It is hoped that their future words and acts will show that their repentance is genuine and their reform permanent.

It might be well to institute a "survey" of the critics of the public school with the purpose of determining the source of their opposition and of "standardizing" the falsity of their statements.

The proposal that the first reform necessary to turn the alleged failure of the school into assured success is to abolish all home study will appeal to that class of parents who, in the language of Dean Briggs of Harvard, "regard school and college as far less serious in demands than business; a place of delightful irresponsibility, where youth may disport himself for a season before he is condemned to hard labor"; but to the great majority of sensible parents and wise teachers who regard a reasonable amount of home study on the part of grammar- and high-school pupils as both an intellectual necessity and a moral blessing, such a proposal is fraught with grave danger to the welfare of the school and the mental and moral life of the pupils.

If the day high school is to continue to be a success, those who attend it must have the seriousness of purpose and the readiness to work which usually characterize the thousands of earnest, industrious students who attend the night schools of our cities, and who are willing, under the most adverse circumstances, to pay the price of the severe application which is necessary to secure the education they crave.

Unless our native-born American boys and girls are willing to take school seriously and work earnestly both in school and at home, they cannot

hope to compete with many of the boys and girls of foreign parentage, whose industry and application are certain to win success.

Is the public school a failure? Do not ask the teacher in the private school, whose failure as a teacher in the public school has absolutely disqualified her to judge with accuracy and fairness; do not ask the aristocratic snob who is not in sympathy with the common school because he is not in sympathy with the common people; do not ask the prejudiced editor who, with predetermined opinion that the school is a failure, looks only for faults and sees only what he is looking for.

But ask the millions of men and women, born in America, who will tell you that their ability to read and write and to attend to the ordinary business of life, and their ideals of right and duty were gained in the public school; ask the hundreds of thousands of foreign-born citizens who will tell you what the open door of opportunity, made possible by the public school, has meant to their children; ask the tens of thousands of earnest, consecrated, successful teachers who are literally giving their lives that the boys and girls under their charge may be better prepared for life and living; ask Mary Antin whose *Promised Land* is a magnificent tribute to the opportunities offered the foreign-born child in the American public school, and whose grateful recognition of these opportunities furnishes an unanswerable refutation to the false charge that the public school is a failure.

It must not be assumed that those who indignantly resent the false charge that the public school is a failure, believe it is perfect. Like all other agencies for human betterment, in charge of human beings, including the home, the church, and the state, the school has its faults, but it stands today as one of the mightiest factors for good in both individual and national life, and is deserving of commendation instead of condemnation.

The school of today is good. The school of tomorrow will be better. It will have larger playgrounds and more of them; better buildings and enough of them to meet all the needs of all the children all the time; and it will have more money to employ and retain still better teachers. Its course of study will be enriched both by the emphasis placed upon essentials and by the elimination of nonessentials. Its pupils will study more, not less, in both school and home.

Notwithstanding a few critics who seem to revel in the hope that they can produce a sensation by a false attack on the public school, this great institution will continue to respond to the highest and best needs of the common people, who know that it is the one hope of their children for an education, and who will continue to give it their loyal support.

We sincerely thank you for the beautiful badge, a facsimile of the Liberty Bell, provided by your committee for the meeting.

The old Liberty Bell, whose home is in this city, is worthy of all the veneration bestowed upon it by patriotic souls. Nearly one hundred and

sixty years ago, according to the official statement, it was "raised and fixed" in the steeple of the old state house, now Independence Hall, from which, in 1776, it rang out defiance to tyranny and independence to America. Seventy years ago last Saturday it sounded its last patriotic note in celebration of the anniversary of the birth of Washington. Since then its tongue has been silent. But in our imagination we can hear its echo each day in the school bells which ring thruout the length and breadth of our land, from Canada to Mexico, and from Maine and Porto Rico to California and the Philippines, and as we listen to these echoes we feel in our hearts that the public school is indeed the hope of the nation, and that so long as it is permitted to do the work for which it is intended, untrammeled by political demagogs, sectarian fanatics, or prejudiced, pessimistic critics, the motto of the bell will continue to be the motto of the school and the nation, and liberty will continue to be proclaimed thruout the whole land to all the inhabitants thereof.

TEAM PLAY BETWEEN CITY SUPERINTENDENT AND CITY

C. P. CARY, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, MADISON, WIS.

One of the most significant sociological facts of modern times is the amazing growth of cities. A world-wide tendency of this sort is observable. A recent writer refers to a student of the growth of cities, who declares that the time will come when London will have a population of twenty millions. He adds that New York and Chicago are likely to have more than double this population, or, say, forty or fifty millions. There was a time when it was thought that cities would reach their limit of population, beyond which they could not grow. But with the development of transportation facilities, it would seem that the only limitation is the limit of space that can be made available for building purposes, which with most cities is practically limitless. Even where natural limitations exist, steel structures may be built to almost any height. The attractive power of the city seems to grow constantly greater. Regret the fact or not, as we may, we must admit that the city is the place of opportunity. Every new invention, every new want developed by civilization calls for additional people in the city to meet the demand of production. The range of opportunity in the country, on the other hand, is comparatively limited; and with the increase in farm machinery the number of workers on the farm is all the while being reduced.

But great as is the increase of population in our leading cities, the increase in wealth far outruns it. The city is a powerful magnet, drawing to it quantities of wealth never dreamed of by any Croesus of old. In the great city is to be found not only wealth and a vast population, but there

also are to be found the ablest physicians and surgeons, the most eloquent preachers, and the ablest leaders in industry and commerce the nation produces. The metropolitan newspapers, the magazines, the fetching advertisements that go from city to country are rapidly urbanizing the country population. The extent to which we are all indebted for city ideas, fashions, and customs, no matter where we may live, has been noted and commented upon by numerous students of society. The advantages cities possess enable them to dominate the ideas and, to a large extent, the government of the entire country today, and, in the nature of the case, this process must continue. It is a characteristic of city people to adapt themselves readily to rapid change. New ideas take root and grow at a rate that is magical. While vice and disease are contagious, it is even truer that in our cities civic ideas and the spirit of brotherhood and co-operation are even more contagious. More and more dwellers in cities are coming to demand clean government, clean streets, clean morals, and a sightly city.

Such advances, however, demand on the part of our cities the expenditure of a vast amount of energy and the united efforts of all forces that make for the betterment of society. There are powerful forces making for deterioration or degeneration. In our cities criminals congregate; ignorance, vice, crime, graft, and all the darker aspects of human nature flourish, for the suitable soil is there found for the development of the noxious elements that constitute the seamy side of life. The forces of light and of darkness are pitted against each other. At times the victory seems to be with one side and again with the opposite. A modern city is largely in a state of flux, people are constantly coming and going. The vast majority rent their homes, and, from time to time, move from one portion of the city to another. There is also a constant drift of population from city to city. Class antagonisms are marked characteristics. Vice, graft, filth, and ugliness constitute a most unfortunate environment for the training of children into good citizens. Thousands in every great city are ignorant of our language, know little or nothing of our government, are clannish and difficult to assimilate, many are from countries having different ideals of government and different customs. To overcome the evil influences every large city has numerous organizations of an uplifting character.

First of all, there are the fundamental institutions—the home, the church, and the school. Sad to say, the home, which has been for generations a haven of safety and a character-developing force, has, broadly speaking, been losing in efficiency. The church has already lost its grip in many sections of the city where its influence is most needed. There are many supplementary institutions and activities, such as the Young Men's Christian Association and the Young Women's Christian Association, social centers, and the like, that have been developed in recent years to aid in protecting, educating, and socializing the young. It is in the school, however, that society must place its main reliance in the prepara-

tion of the young for citizenship. Year by year it becomes more obvious that the school must assume larger burdens and must take upon itself greater responsibilities. To the school, then, we must look as the one broad, comprehensive institution, whose function it is to change all children from the condition in which it finds them into intelligent, right-minded citizens, capable of co-operating with others and willing to do so; capable of earning a living and eager to do so. We must admit, if we are frank with ourselves, that the school falls far below the ideal that we conceive it possible to reach. It is run on too cheap a basis; it does not appeal to all children; it pays too little attention to character and the formation of ideals; too little attention to the work-side of the human being. It is still largely a device for dealing in an economic way with children in the mass. It deals with them in a manner that is artificial, and by this I mean a manner foreign to their daily experience. Our schools are, in spite of us, bookish, abstract, up-in-the-air sort of institutions. At best our city children are lacking in vital experience. Their contact with the world is a contact largely with city people and city streets. Immediate contact with the grass, the flowers, domestic animals, the earth itself, the opportunity to plant things and see them grow, the opportunity to adapt means to ends in fundamental ways, are largely denied the city children. They are familiarized with the noise and din, the rush and roar, the touch-and-go methods of the city, all tending to exhaust nervous energy, and to stimulate strongly in certain abnormal directions. Teachers herd children in rooms in numbers anywhere from forty to sixty, with little reference to the physical or mental condition of those under their care. It is true that we are making beginnings in the direction of improving these conditions, but thus far in most cities we have gone no farther than to reach the consciousness of need; any adequate adaptation of means to ends for securing better things is still in the period of discussion.

Schools in the past have adapted themselves largely to the class of pupils who take kindly to abstract subjects, in other words, the intellectual, meditative type of children. This type is not the normal, but rather the abnormal, or at least the unusual type of person. Most children are motor rather than reflective. They learn by dealing with things in the concrete rather than by getting knowledge from the printed page or the voice of the teacher. As a result children in vast numbers drop out of school. They do not find in the school the sort of thing that appeals to them. They are looked upon as dull and unpromising, and become accustomed to failure rather than success—a very serious matter in the life of a child. They wish to get away from the unpleasant environment of the school. Unless strong pressure is exerted upon them in the home they drop out and engage at best in blind-alley occupations; at the worst, they become juvenile delinquents and constantly degenerate. The problem of the city school is, therefore, one of the utmost difficulty. How shall the child's environment

be made more natural, less stimulating in abnormal directions, and more stimulating in normal directions? How shall children be separated into groups upon a natural basis of interest, desire, and capacity, as over against artificial and unnatural grouping to be found in the average city classes? How shall children and their parents be convinced that the school is really worth while in itself and as a preparation for life? How shall the various beneficent forces tending to improve the city and city life be brought into co-operation with the school?

My reply is that these things depend mainly upon the city superintendent of schools. I know of no larger or more splendid field for service in America than the superintendency of a great city system of schools. The opportunity is there to call forth to the utmost the abilities of the most capable and most thoroly trained men in the nation. It is needless to say that the superintendent must be a man of large native capacity, an organizer, a man well informed as to the best plan for rendering the city beautiful, sanitary, morally wholesome, and progressive. He should understand racial differences in capacity and skill. He should be well informed with respect to physical and mental weaknesses that manifest themselves in children. He should not be ignorant of sociology, political science, and economics. He should not be a stranger to the elements of law and the fundamental rights of man. He should be a social engineer for his city. His work should be so organized, that under his general supervision may be found a small army of highly trained specialists, such as medical inspectors, architects, business managers, statisticians, school inspectors, specialists in child psychology, nurses, and truant officers. He should have an assistant of large capacity for such work, who would take the brunt of the office business, the communications, interviews, and the burden of details. The superintendent should have his reports from his field officers and his assistants generally, thus keeping him in constant touch with the vital phases of the educational situation. He should know the men and women who are working in all the principal fields of human uplift and be familiar with their plans. All these forces should have the benefit of his suggestion and co-operation. His vision should be more comprehensive than that of any other single individual. He will not be so familiar with details as many others are in special fields, but his views will be fundamental and constructive, and will tend to unify the efforts of many diverse elements into effective co-operation.

You may well wonder who is sufficient unto these things. Not many, it is true, in a population of one hundred millions. But the chances are that there are enough to be found to meet the demands for all our great cities, if the salary is one to compete with positions in great corporations and in great business enterprises, and at the same time the position is made sufficiently stable so that it may serve for a life-career. The position of city superintendent has not in the past been attractive to most men of great

ability, for the reason that it has been a thankless job, subject to endless annoyances and frequent dismissals. The city superintendent has been checked up, harassed, and annoyed by petty politicians and by the evil influences common in cities. The city superintendent must be not merely a man of force, but a man of diplomacy and of skill in dealing with all types of men.

A new day is dawning. Ten thousand dollars a year for a city superintendent no longer causes surprise. But even this is not half-pay for the talent required for such a position. You may think it visionary, but I believe there are young men in this association today who will within the next two decades receive salaries of twenty-five thousand dollars a year in such cities as Philadelphia, New York, Boston, and Chicago. Such positions are now worth twenty-five thousand dollars if properly filled. Young men who are looking forward to careers in such positions may easily make the mistake of thinking that proper training for it is the work now offered for a Ph.D. degree. Not so. What a city superintendent needs is tact, diplomacy, forcefulness, native capacity, and an all-round sort of education that stops short of a high degree of specialization in any one field of knowledge, such as leads to the degree of Doctor of Philosophy. A superintendent need not be deeply grounded in the history of education, but he should know the latest results in an educational way in such centers of investigation as the University of Pennsylvania and Vineland, N.J. He should know what such men as Giddings, Ross, Small, and Ellwood have to say about social psychology. He should know what such men as Suzzallo and Dewey have to say about the school as a social institution. In other words, a man in order to prepare himself for the superintendency of a great system of schools must today pick up his education in at least a dozen different places. However, the present city superintendent, who has capacity equal to that of a great corporation lawyer or a Napoleon of finance, may readily enough pick up, from his reading and his personal investigation, the needed knowledge to guide him in the selection of specialists, and in the intelligent, broad-minded, official direction of specialists. No superintendent of a great city system should suffer himself to be cumbered with much petty serving. Like the great surgeon, he needs to limit himself by having others give the preliminary diagnosis; and he needs to limit himself in the quantity of work, properly detailing the affairs that can readily enough be done by others, so that he may have freshness and vigor of mind to deal with problems involving initiative and elements of novelty.

The city superintendent, the social engineer of the city, will look forward to the elimination of poverty and the evils connected with it. He will look forward to the beautifying of the city; he will look forward to the development of such ideals in the minds of all as will make for sociability and good will and co-operation. He will put into his school curriculum and into the training of children those things that will not merely make more

intelligent citizens, but self-supporting citizens, and right-minded citizens, bearing in mind that as is the city, so will, in a large measure, be the country. The magnitude and importance of the work of a city superintendent is of a character to cause almost any other phase of human endeavor and human responsibility to suffer in comparison. The young man who feels himself equal to such a task and such an opportunity, and is moved by a high sense of social good will, should go forward with unremitting energy in his preparation for that largest and most promising of all fields, the city superintendency.

TEAM PLAY WITHIN THE SYSTEM

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Team play is the force which gives to an organization an effectiveness greater than the combined forces of all the individual members of it. It is not democracy, but it is a product of democracy modified for the sake of efficiency.

And as to team play "within the system," where, indeed, can there be team play, except inside the team? There may be a friendly feeling of co-operation between the team and the bleachers, or a feeling of harmonious understanding between the players and box office; but team play in the strict sense of the term is impossible except inside the team.

Team play is an important element in the winning of victories; yet it may be at once admitted that victories can be won and have been won, after a fashion, by organizations of individuals with little team play, or none at all. A ball game might happen to be won by a star pitcher and catcher with the seven other places filled by dummies. There is practically no true teamwork in a military organization where one general authority gives all the commands and the rest do as they are told. There is no true team play in the convict camp, where the guards drive the men to and from their tasks each day. There may even be a fairly successful system of schools where there is little team play or none at all.

Team play does not consist in the giving and carrying-out of orders. Neither does it consist in a general spirit of friendly co-operation. It includes some touch of each of these elements, and a great deal more besides.

Team play, to be genuine, must be based upon the spirit of team play. It is not a matter of legislative enactment, or of exact metes and bounds. It deals much with duties and services and little with rights and privileges. You cannot secure team play by marking up the ball field into nine parts, every part to be assigned to some one player, no player ever under any circumstances to invade the territory of any other player. Neither is that superintendent or principal likely to secure teamwork who clamors loudly

for his own rights to be clearly defined, and his own authority increased by legislative enactment.

It is always hard to give an analysis of that complicated force which we call the underlying spirit. Nevertheless, so far as we can analyze the spirit of teamwork, it may be said to consist of individual efficiency, responsibility, co-operation, unity, and self-effacement.

The first requirement is that every individual member of the team be assigned some special place to play, and that it should be the place which he can best fill. There can be no team play of the highest type unless each member can fill his own position better than any other member of the team can fill it. The recognition of this fact is absolutely essential to that individual efficiency which is at the bottom of all true team play.

The second requirement is that every individual member should know the rules of the game. He should especially know the general object of the game. This is necessary in order that there be individual efficiency. If some member of the football team believed the good lay to the east of them, while others thought it lay to the west, and still others to the north, or the south, the most conscientious efforts of the players would result only in confusion worse confounded.

We have sometimes tried to organize our educational teams on the theory that only a portion of the members need know the rules of the game. We have assumed that if one or two minds in the school knew what they want to do, the rest could all do as they were told. It is folly to expect untrained individuals to develop on the team greater efficiency than they have as individuals.

But while it is necessary that all members of the team should know the rules of the game, it is not necessary that all of them know the philosophy of the game. They may win great victories when few if any of the members know anything about the theory of curved lines, the law of permutation, the calculation of chances, or the estimates of velocities.

The trouble with much of our training for educational work in the past has been that much of it has been either too far or too near. Sometimes we have stressed educational philosophy which the teacher has been utterly unable to translate into practice in the actual schoolroom. We have confused educational philosophy with educational training. Then again we have sometimes stressed mere devices, which the teacher can use as directed, and with little understanding of the principles on which they are grounded. Somewhere between these extremes there must be a middle ground on which we can deal with those broad general principles on which the entire educational process rests. In order that we may have real teamwork within our educational system, every member of it must have training in these principles.

There are distinct limits, however, even to the application of this wholesome doctrine. One of these is to be found in the general level of

human ability. In order that a school program be effective, it must be such that it can be carried out by men and women of average ability, or not greatly above it. The all-star team is an aggregation gotten together at the end of the season, after the real victories have been already won. An all-star team in a real contest is an unheard of thing. There are a number of reasons why this is so, tho it may not be profitable to inquire into them now.

In a school of ten or a dozen teachers, with plenty of money behind it, it may conceivably be possible to secure teachers, all of whom may be of decidedly more than average ability. The school then may or may not be a success. In a school of a thousand or ten thousand teachers, it is practically impossible to secure an all-star team. To begin with, there are not stars enough to go round. If there were, there would not be money enough to secure them, nor, in view of possible piratical raids from other ambitious systems and certain invasions by Cupid, would it be possible to retain them, even if they were once secured.

We have already suggested a second limitation upon the preparation of teachers for good teamwork; namely, the financial limitation. There can be little teamwork where most of the money goes to one member of the team. It is true that some members receive larger salaries than others, and properly so, because some places are harder to fill than others, and yet other places are filled better. It is neither just nor expedient to make heavy demands upon individuals whose salaries are low. Poor as the work undoubtedly is in many schools at present, it is probably better than the money paid for it would call for.

The elements of individual responsibility and co-operation might at first glance seem almost contradictory. On the contrary, they are supplemental. It is needful, to begin with, that each worker shall understand distinctly the special duties assigned to him, and shall be held responsible for doing them. It is equally needful that each member be willing and able to help the other fellow perform his duties, or, in case of necessity, to perform them for him.

The successful pitcher must be able to pitch. In addition to this, he should be both able and willing to cover first base in case the exigencies of the game call the first baseman elsewhere for the moment.

In the ordinary system of schools, it is undoubtedly the business of the janitor to make the fires and sweep the floors in the morning. Nevertheless, if the janitor has not made the fire, and if there is no one else who can make it, it would be a very poor superintendent or principal who would allow the children to shiver in the cold merely because it is not one of his official duties to make the fire. Sometimes official dignity enables one to dodge certain school duties fully as important as the making of fires. The spirit of team play, on the other hand, would lead any member of the team to do anything that needs to be done when there is no one else to do it.

Then there is that other element of self-effacement. The individual should be subordinated to the good of the team. It is here that the trouble

comes in with the all-star team. The recognized star sometimes lacks the capacity for self-effacement. The best individual player does not always contribute the most to the success of the team. The best individual teacher in the corps is not always the greatest factor in the success of the schools.

Rigid specialization is a dangerous thing in a school system. It makes against teamwork, rather than for it. The more elementary the work, the greater the possible danger in the specializing. The specialist is almost always an egoist—at least potentially. He follows his own specialty because he believes it more important than any other fellow's specialty. If he does not think so when he begins, he generally does before he concludes. The danger is that he may grow to think his own specialty more important than all the other fellows' specialties put together. Still worse is it for him to think his specialty more important than the welfare of the child. In this case his attitude is that of the player who insists on making spectacular plays even when they endanger the winning of the game.

Specialization in our schools there must be, as prerequisite to that individual efficiency which is back of all good teamwork, but not overspecialization. The danger of this is increased when the departmental system is used. This system has demonstrated its rights to be carefully considered even as low down as our intermediate grades. Its use there, however, makes all the more important the most careful of team play. Unless the specialist who teaches the child arithmetic is careful to confer with the other specialist who teaches him geography, and with that other specialist who teaches him reading, and with those other specialists who teach him other subjects, the child may be so loaded down by the aggregate of specialties that his mental, moral, and physical welfare may be wholly lost sight of.

The antidote for overspecialization in our schools is not less of the specialty but more of other things. It calls for no less of depth but for more of breadth. The man who is *merely* a mathematician is incapable of team play, and hence has scant place in a modern school system. The man who is more than a mathematician will have a broad view of the educational problem, and then the more mathematics he knows, the better.

The spirit of teamwork in our schools demands the recognition on the part of all concerned of the fact that no department and no subject is in itself worth anything, but that the general welfare of the child is worth everything. The capacity for self-effacement is today more than ever before one of the qualifications of the successful teacher. What is known on the ball field as the "sacrifice hit" never wins any victories, but it is frequently an essential factor in winning them.

One of the places where the capacity for self-effacement is most frequently needed is in the matter of individual credit. The man who habitually considers the question as to who will receive credit for any given educational achievement is by that very fact incapacitated for teamwork

in the schools. The schools have room for the biggest, most broad-minded men and women that can be attracted to them; but they have no room whatsoever for the man or woman so narrow as to hesitate to take a needed step in advance for fear someone else may get the credit for it. "There is glory enough to go round," said the hero of Santiago Bay. For broad-minded men and women in the schoolroom there is always glory enough to go round, even when there is none at all.

There still remains to be considered the element of unity. It is this that makes the team a team rather than a mob or a gang. There is but one purpose and that is the success of the team. For the carrying-out of this one purpose there must be unity of action. This means that for executive purposes the team must have a captain. On the field his authority must be unquestioned, no matter how much his decisions may be matters of subsequent discussion in the council chamber or elsewhere. However, the spirit of team play demands that the captain be a leader, not a boss, or even a commander. Armies have commanders; convict camps have bosses; schools need leaders.

This brings us back again to the original proposition that the efficiency of team play depends largely upon the efficiency of the individual members. Anything that cripples any individual cripples the team. Whatever subtracts from the power of an individual member or stunts his growth subtracts from the power of the team and reduces its efficiency. The welfare of the team is in general best subserved by the fullest possible growth and development of each individual member. The efficiency of the leader is best shown by his power to develop efficiency in his team mates. Any system of supervision which tends to crush out spontaneity or individuality is ruinous to the individual, and hence to the system. The chief problem of the supervisor is how to develop to the fullest the powers of the individual worker, and yet to develop them along such lines as will contribute most to the individual good. To this end, the supervision should concern itself chiefly with results, and only secondarily with methods. The results to be reached should be clearly set forth, and methods should be suggested whereby these results may be reached. Beyond this, however, the supervising power should hesitate to go. If the worker can reach the desired results by some other method than the one suggested, he should not only be allowed to do so, but should be encouraged to do so, and should be applauded for so doing.

The arch enemy of team play is distrust—especially when it takes the form of jealousy. The object of the team is to make headway against some outside force. Every ounce of energy used in internal dissension is subtracted from the individual efficiency and from the power of the team. Distrust keeps one from leaving it to his team mate to do that which he best can do. If the superintendent of schools is afraid of the high-school principal, the two may possibly be individually efficient, but there is no team

play possible between them. No man who is afraid of the man officially under him is fit to be an educational leader; and no man who is afraid of the man officially over him is worthy of any place on the educational team at all. The spirit of teamwork is a spirit of "all being in the same boat." It is a spirit of mutual trust, of camaraderie, of good-fellowship.

From this good-fellowship, the personal element cannot possibly be absent. We cannot be team mates with strangers. True leadership manifests itself most easily thru the personal touch. Long-range leadership is possible, but difficult. The truth of the old saying that "the eye of the master is worth a dozen men" finds its parallel in teamwork, when the captain is not a master at all, but a leader.

Team play in general presupposes limited numbers. There are nine men on a baseball team and eleven on a football team. It is hard to conceive of a real team of a hundred men. It is almost impossible to conceive of one of a thousand men. This limitation, however, depends as much upon the limitations of executive ability as upon intrinsic difficulties. It is hard to assign to each one of a thousand men some special function to perform. It is hard to conceive of a thousand men, each looking to the leader for personal suggestion as to the performance of his function.

In order that there be educational team play at its best, the school organization must either be small enough to allow the superintendent to come into personal touch with every teacher, or else it must be organized in units each so small that the leader in it can come into personal touch with all the teachers. In a town or a small city, the entire system may be a unit. In a large system, the district is the unit. In a very large city, it is the individual school.

As to the individual school, the ideal one is undoubtedly one not too large. How large is too large is another question. It depends upon the size of the man at the head of it. No school can profitably be bigger than the man at the head of it. To secure true teamwork in a high school of sixty teachers and two thousand pupils, is not impossible, but it is difficult. There is no occasion to despair of the big school, but we do well to recognize the complexity of its problem.

The limits of time do not allow a discussion of the exact assignment of duties to those officials in our school system known as superintendent, principal, supervisor, or teacher. These titles must necessarily carry with them different duties in different school systems and in communities of different needs. The duties of the superintendent of schools in New York City, for instance, bear slight resemblance to those of the superintendent of schools in a town of five thousand people. Suffice it to say that in any city the superintendent ought to come just as close to the schools as he can, while still preserving a view of the school system as a whole. You cannot come very close to Pike's Peak and still see the peak as a whole. The principal in the large place must do many of those things that the superin-

tendent does in the smaller place. The supervisors in the larger places also perform for their especial subjects the duties which belonged to the superintendent in the smaller system. The exact duties of each of these functionaries should be as clearly defined as they reasonably can be; but nevertheless, true team play will depend, not upon legislative definition, but upon the spirit of team play. This spirit is possible, let it be said by way of recapitulation, under the following conditions:

1. When there is the greatest possible amount of individual efficiency among the members of the corps.

2. When each member has a training sufficiently broad to enable him to see not only the good of his speciality, but its relation to the entire scheme of education.

3. When the financial treatment of the entire corps is adequate and fair.

4. When each member is willing, not merely to do the special duties assigned to him, but also to help with the other fellow's duty if need be.

5. When there is no spirit of distrust or of jealousy within the corps, and no anxious seeking for individual credit, but rather a feeling of camaraderie and good-fellowship.

6. When the personal touch is felt all the way thru the system.

7. When the team works as a unit, not of compulsion, but by reason of loyalty to the leader and to the general good.

8. When the system is either not a large one, or else is organized in units not beyond the leadership of one man.

9. When each member of the corps has the capacity for self-effacement when necessary.

10. When the teamwork is so arranged in general as not to hinder, but to help the fullest development of the individual.

A. UNIFORMITY OF STANDARDS IN SCHOOL ADMINISTRATION

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Public education in America has always been subject to the supervision and control of the several states. Our forefathers in the Constitutional Convention of 1787 did not undertake to determine the relation of the national government to public education nor to declare the attitude which it should assume upon that important subject. From the very beginning of our national life, public education has been recognized, not as a national and not as a local, but distinctively as a state function; and there have, therefore, grown up thruout the country definite state systems of education. The several states have never recognized public education as the business of a district, village, town, city, or county, but have always assumed con-

trol of the general direction of their educational activities. The decisions of the courts of last resort in the several states have universally sustained the cardinal principle of state administration of public education. Attention is directed to the language of the courts in deciding this point in three important cases.

The Supreme Court of Indiana in *State* v. *Haworth* (122 Ind. 462) held:

> The schools in which are located and trained the children who are to become the rulers of the commonwealth are matters of state and not of local jurisdiction. In such matters the state is a unit, and the legislature the source of power. The authority over the schools and school affairs is not necessarily a distributive one to be exercised by local instrumentalities; but, on the contrary, is a central power residing in the legislature of the state.

The Supreme Court of Illinois in *Fuller* v. *Heath* (89 Ill. 296) held:

> The officers of a city may be invested with powers by the legislature to levy and collect taxes for the support of common schools. Such laws, wherever found, are a part of the school laws of the state and not strictly a part of the charter or law of a city. In such cases the city officers are mere agencies of the public to carry into effect the objects and purposes of the general school system.

The Court of Appeals of New York in *Gunnison* v. *Board of Education of the City of New York* (176 N.Y. 11) held:

> The settled policy of the state from an early date [has been] to divorce the business of public education from all other municipal interests or business and to take charge of it as a peculiar and separate function thru agencies of its own selection and immediately subject and responsive to its own control.

Fifteen important decisions of the courts of Indiana, Illinois, Kansas, Kentucky, Minnesota, Texas, and New York also support this principle, and many others could be cited. These cases are

State v. *Haworth* (122 Ind. 462).
Bank v. *Brainerd School District* (29 Minn. 412).
State v. *Freeman* (61 Kan. 90).
Fuller v. *Heath* (89 Ill. 296).
Marshall v. *Donovan* (10 Bush (Ky.) 681).
People ex rel. v. *Bennett* (54 Barbour 480).
Gunnison v. *Board of Education of the City of New York* (176 N.Y. 11).
Lafayette v. *Jenners* (10 Ind. 70).
State ex rel. Organ (159 Rid. 123).
Peavy v. *Talbot & Brothers* (39 Texas 335).
Redinour v. *The Brooklyn Board of Education* (15 Misc. 148).
Matter of Harris (58 Misc. 297).
Hutchins v. *Skinner* (21 Misc. 729).
People ex rel. Walrath (112 App. Div. 97).
Ham v. *Major* (70 N.Y. 459).

For many years the educational systems of the several states were controlled solely by legislative enactments. As these systems gradually developed, the accepted policy of the country found expression in the constitutions of various states. In 1857, the people of Minnesota incorporated into their state constitution the following:

[Sec. 1, Art. 8] The stability of a republican form of government depending mainly upon the intelligence of the people, it shall be the duty of the legislature to establish a general and uniform system of public schools.

In 1907, or fifty years later, the people of Oklahoma incorporated into their state constitution the following:

[Sec. 1, Art. 13] The legislature shall establish and maintain a system of free schools wherein all the children of the state may be educated.

The provision of the constitution of Oklahoma is almost identical with that incorporated in the constitution of New York in 1894. That forty states have incorporated similar provisions in their constitutions, and that each state in the Union has incorporated other provisions in its constitution to promote educational interests, is conclusive evidence upon the proposition that public education is universally regarded in this country as a matter to be regulated by state policy and control.

The establishment of a state school system pursuant to a constitutional mandate, to be supported by state funds and by public taxation, presupposes a uniformity of school administration which shall at least assure equal educational opportunities and privileges to all the children of a state. This principle has been recognized in every state school system of the country. There have been for many years in each of the several states uniform laws regulating the machinery for operating the schools, such as a uniform basis of apportioning public funds, of levying taxes, of supervision, of issuing teachers' certificates, and of requirements as to attendance. The tendency in legislation affecting school administration thruout the entire country is toward an even greater degree of state uniformity, direction, and supervision. Laws have been enacted in several of the states in various sections of the country, providing for minimum salaries for teachers, for uniform certification of teachers, for the retirement of teachers on annuities, for the supervision of schools, for compulsory attendance, for medical inspection of pupils, and for the sanitary and safe construction of school buildings. The history of the enactment of these laws and of other uniform school laws in each state in the country has directly resulted in a period of increased educational progress, achievement, and efficiency. The character of legislation upon school questions is simply in harmony with the general policy of the whole country in legislation upon many other important subjects. There is not only uniformity in legislation upon labor questions, health, and sanitary measures and acts pertaining to public utility corporations, for instance, but there is also a centralization of supervisory authority in the respective states over these matters.

This vital principle in the administration of public functions has been the means of inducing legislative bodies to enact more readily a law which is state wide in its application, rather than one which applies to a single community. A general law can be made stronger and more effective than a local law. Experience shows that a general statute is usually respected

more by the public, and therefore more readily enforced. The question in point, therefore, is not, Has the state a right to direct and control public education thru uniform standards? This particular question has passed beyond the stage of discussion. The policy of the several states in the enactment of school laws for nearly a century, in the adoption of constitutional provisions in relation to public education, and in the interpretation of such laws and constitutions by the courts has definitely settled this question. The real question however is, To what extent should a state establish uniformity in the administration of its educational activities?

It should be distinctly understood, however, that state direction and control of public education does not and should not mean a state monopoly of educational affairs. No state in the Union ever has had or ever will have a monopoly of public education. Such a scheme of education would be so repugnant to the overwhelming feeling of the people that it would not be tolerated in a single commonwealth. A state supervisory officer in any state in this country who should attempt to administer public education upon such a basis would possess a very clear conception of the meaning of the term "recall" when the time for his re-election approached. But state monopoly of education is quite different from state direction and control. State direction and control of public education means simply that the state shall clearly assert its duty and obligation to the people and shall guarantee to them full protection in their rights and needs in a matter so vital to their happiness and prosperity. Furthermore, in a well-directed state system, the principle of co-operation between the state and the locality is established, and the greatest freedom, authority, and initiative possible in the execution of minimum standards set by the state are conferred upon local authorities. Such authorities should also of course possess the power to provide such additional educational facilities for their locality as the wealth, the commercial needs and prosperity, the social and intellectual attainments, and the sentiment of their people will support.

From the beginning of the several state school systems, the laws of the various states have universally authorized the selection of officers in each city and in all other sections of the state to represent jointly their respective localities and the state in the execution of the state's general plan of public education. It has been the policy of many of the several states, in creating organizations for the operation of their schools, to utilize so far as possible the machinery already created in a community for the exercise of the powers necessary for the maintenance of local government. This has been done as a matter of economy and simplicity of administration. As pointed out in the decisions before cited, however, these officers have been independent of the municipalities in which they have served, have been corporate agencies of the state's own creation, and the laws have been interpreted as school laws and not as purely municipal laws.

It has been a wise practice on the part of the several states to create

in their state school organizations a local school autonomy. This action has undoubtedly stimulated the interest of the locality in public education. As the country developed and the cities outgrew the original district organizations, it was quite natural that, in the establishment of a more comprehensive scheme for the local government of schools, the laws relating thereto should have been incorporated in many instances in city charters or other laws pertaining to the government of cities. This method of defining the local powers and authority of school systems has led to the adoption of the erroneous idea that the schools were of local interest only and were to be regarded generally as the usual departments of a municipal government. The policy of utilizing city officials in the administration of the work of the schools, and of conferring upon them the power to determine appropriations and control budgets has given to the common council, the board of estimate and apportionment, or other similar bodies in many of the cities of the country, greater influence over the management and control of the schools than the board of education and the superintendent of schools. In many cases, city officials not legally associated with the schools and in no way responsible for their management have usurped the functions of the legally chosen school officers. This plan means a division of responsibility in school administration, which results in a delay in providing necessary school buildings and other improvements, and is to the distinct detriment of the children's interests. The authority exerted thru this source has often resulted in influential citizens and political organizations exercising the power of appointing teachers, of increasing the salaries of those in whom they were interested without reference to their fitness or worth, and of exercising other functions in the administration of the schools, which the generally accepted policy of school management required school officers to perform. This is one of the weakest points in our public-school system. The leaders of educational thought in this country should strike a decisive blow at this evil, should lead in the fight for the complete freedom of the schools, for the complete independence of those legally charged with their management, and for the universal recognition of the principle that the schools are institutions dedicated to the service of the people, and that no power or influence shall be permitted to impair their usefulness or efficiency. No less an authority than the strong right arm of the state supported by an enlightened and aroused public opinion can protect the schools of this country from the dangers of political mismanagement.

There is no force to the suggestion that conditions in the several cities of a state are so varied that separate laws are required for the proper regulation and management of the schools in such cities. The fact that in many states there are separate laws to govern the school affairs in each city in the state is a distinct weakness in the general plan of school administration in cities. Experience shows that the mere fact that the laws governing the schools of a city are local statutes invites interference from local municipal

authorities. The administration of school systems in cities would be greatly strengthened by state uniform laws regulating the cities either as a whole or by distinct classes, as already provided in certain cities. The board of education of any city is the educational legislative body of a city. Its important function is to determine the broad policy on which the schools shall be managed. The board administers the business management of the schools and should consist of men of business training and experience. The influence of the lay citizen upon the public-school system is quite as essential to the vitality and strength of such system as the influence of the professional school man. To eliminate such lay influence would be nearly as destructive to efficiency as the elimination of the professional influence. Each of such influences, under proper regulation, is indispensable to the development of the highest degree of efficiency in school management. The board should select professional men to execute the policies which it has adopted. There must, of course, be discussions, mutual agreements, and co-operation between those charged with the business management of school affairs and those charged with the professional direction of the schools. Those charged with the educational supervision and direction of the schools must be given the greatest latitude and power of initiative possible. Neither the board nor individual members thereof should interfere with the prerogatives of the supervisory and teaching staff. Supervision should not be narrow and arbitrary. To be effective it must be liberal and broad-minded, sympathetic and tolerant; it must unite and not disrupt; it must stimulate the entire teaching force and bring out of every teacher in the service her own teaching powers and individuality.

The laws of the several states now very generally prescribe uniform conditions in relation to the state's obligation to its children and to the maintenance and physical equipment of the school. They state the hours when the public schools shall be in session. They also fix the minimum period of time each year during which the schools shall be maintained in every district and city. In many states the compulsory attendance laws specify the subjects in which instruction shall be given. Nearly all states have compulsory attendance laws, and in many states most stringent statutes upon this subject have been enacted. Neither the right nor the propriety of the state to enact these laws has ever been seriously challenged in any state in the Union. In many states the statutes regulate the construction and repairing of school buildings, by requiring that such buildings shall conform to certain standards in relation to heating, lighting, and ventilating. These laws even specify the extent of floor space and the cubic feet of air space per pupil in each study or recitation room. The amount of pure air required every minute for each pupil and the facilities for exhausting the foul or vitiated air are prescribed in these laws. Various other details in relation to the construction of halls, doors, seats, stairways, aisles, and fire escapes are also prescribed in such laws. The states which

have enacted these laws have taken every precaution to make local school authorities responsible, not only for the sanitary condition of the school buildings, but for the comfort and safety of the children who attend them. This is the true policy for the state to pursue, because the state has stretched out the strong arm of its authority, and, thru the enactment of compulsory attendance laws, made it mandatory upon every child within certain ages to attend these schools. The authority of the state over the child in this respect is superior to parental authority. But the several states have gone even farther than this in safeguarding the interests and rights of the child. Many states have enacted laws defining the kind of vocations in which children may be employed, specifying the age limit, prohibiting their employment in hazardous or questionable occupations, prescribing sanitary conditions in the buildings in which they are employed, and prohibiting the use of dangerous machinery in the factories or shops where they work.

The substance of the details of these various statutes enacted by many of the leading states of the country are cited to show that the state has gone almost to the limit of its authority in enacting laws intended to protect childhood in the enjoyment of its legitimate privileges. Since the state has regarded it a duty to assume the function of providing for the education of its children, since the state commands all children to attend school, and since the state has assumed the supervision of the physical welfare of its children to the extent which has been shown, how can the state possibly escape the obligation of assuming the more important function of expressing the broad outlines upon which the child's intellectual development shall be based? The trend of educational administration thruout the whole country is in this direction. Upon information received from the chief educational officer of each state, it appears that forty-four states issue and supply to their schools a state syllabus. Conservative Massachusetts, whose leadership in sound educational administration is acknowledged, and whose respect for the traditions of her fathers challenges our admiration, but whose recent progressive tendencies in many ways have astonished the country, is one of the most recent states to promulgate a state syllabus. Of the forty-four states which issue a state syllabus, the use of the syllabus is mandatory under the law in twenty-four, and in the remaining twenty states, altho its use is optional, the local school authorities have very generally adopted it.

A syllabus prescribed for the general direction of the instruction given in the schools of a great American state should have an important bearing upon the whole purpose of a school system. In the preparation of such a document, the state is bound to take into account the children who are constantly leaving school, quite as much as it does those who remain in school. It is safe to say that at least 40 per cent of all children who enter the elementary schools discontinue attendance at the end of the sixth year. Less than 50 per cent of the children who enter these schools thruout

the entire country complete the eight-year course. It is also a fact that less than 50 per cent of those pupils who enter the secondary schools complete two years of the work in such schools. The fact, however, that such large numbers of children enter the secondary schools is evidence that their parents are desirous that they shall have the advantages afforded by the study of the cultural subjects usually included in secondary-school courses. The effect of this diminishing number of pupils in the upper years of the elementary course and the early years of the secondary courses, however, is to decrease the efficiency and consequently the productive value of this large body of the nation's wage-earners, and therefore to defeat one of the very purposes for which schools are maintained at public expense. This condition in school affairs, therefore, has an important bearing upon the entire social, industrial, and economic conditions of the country. The schools should be organized and such courses provided as to make it possible for this vast army of young people who are to be numbered among the millions of the nation's toilers, not only to complete eight years in elementary-school courses, but also to make it ultimately profitable to complete at least a two-year vocational course in the secondary schools. No state in the Union should fail to grasp the great opportunity which is presented for the development of culture as well as efficiency thru proper courses of study for the average person between the ages of fourteen and sixteen.

These results may be secured by a six-year elementary course, general in character and adapted to all children until they reach that period of their development when they manifest different interests, mental powers, and tastes, which is usually at the age of twelve. This should be followed by a two-year intermediate course covering the usual seventh and eighth grades and rounding out the elementary course. In this course, the work should begin to differentiate, and it should lead to the usual high-school courses, to commercial courses, and to industrial courses which, of course, include agricultural courses. Special two-year courses, as well as the four-year courses, should be maintained in high schools. All these courses above the six-year elementary course should be sufficiently flexible to meet local conditions and needs thruout a state, and even the varying social and industrial conditions in the different sections of a city.

It is not contended that a rigid uniform course of study should be required in every school of a state or even in all the schools of a large city. It is not even suggested that the syllabus should be substituted for the elements of self-reliance, originality, and enthusiasm so essential to vital and efficient classroom instruction. It is not advocated that less emphasis should be placed upon the formal cultural subjects, or that the ambition of any American child to complete one of the traditional academic courses and enter college should be diverted or thwarted. Nor does this enlarged scope of the school jeopardize in any way the democratic spirit and theory

which now pervade the entire school system, by the intermingling of all classes and types of children in the study of subjects common to usual programs. A syllabus should always represent the judgment of the majority of the teachers of the state in which it is used. It should be prepared by committees of leading teachers of recognized authority respectively in the several subjects which it covers.

The necessary limits of a brief address preclude discussion of the desirability of uniformity in educational administration except in this broad general outline. Enough has been said perhaps to warrant the suggestion that uniformity of method in educational administration in the several states should be founded upon the following general principles:

1. The absolute divorcement of school affairs from all municipal and political activities.

2. The incorporation of school laws governing cities or other local political divisions in general education laws instead of city charters or local laws.

3. The board of education of a city school system should be the supreme local authority in the government of its schools.

4. The purely professional management of the schools should be under the direction of the superintendent of schools.

5. The general maintenance of the schools should be secured by a general method which will provide fixed appropriations based upon the increasing needs of a school system.

6. The appointment of teachers should be from lists of eligible candidates in the order of their merit.

7. The adoption of uniform courses, in which only the essentials of a fundamental education shall be included, with sufficient flexibility to meet local conditions, and permitting local authorities to include such additional instruction as may be wise.

The democratic sentiment of the nation has been the basis of the establishment and development of our several state school systems. Every great movement in this country to extend and liberalize popular education has followed some great movement founded upon the progressive democratic thought of that day. The founding of public schools came after the Revolution, the great struggle to make such schools free, and to extend their privileges to all children upon an equal footing occurred near the period of our history when Lincoln wrote his Emancipation Proclamation, and the sentiment so universal today that our great school systems are not rendering the real service which they should to the great majority of children who are in attendance upon them is founded upon that enlarged, beneficent spirit of democracy which a century's life of the free institutions of this country has developed in the American people. This same sentiment will continue to determine the form, character, and substance of public education in this country.

If the welfare of society and of the state depends upon the dissemination of education to all classes and to all sections of the state, if the stability of a republican form of government depends mainly upon the intelligence of the people, as declared in the constitution of Minnesota and of other states, if the state is to exercise its constitutional power to tax the property of all its citizens for the accomplishment of this result, if the state is to exercise its authority to compel the children who are to become its future citizens, and upon whom its welfare depends, to attend upon instruction provided for them, if public education is to be so organized and administered as to bear directly upon the life of its people, to improve their living conditions and raise their moral, industrial, and intellectual standards, if the schools are to become more responsive and more adaptable to the changing conditions of our progressive civilization and enlightened democracy, if the management of the schools is to be emancipated from the destructive influences of favoritism and of partisan politics, if the schools are to be conducted upon sound business principles and correct pedagogical standards, if superintendents, teachers, and school officers are to be given the official freedom requisite to strong, aggressive direction of school work, and are to labor in proper co-operation with one another, and if men of business experience, skill, and judgment of a high type are to be induced to accept responsible positions on the controlling bodies of local school systems, if all of these results are to be accomplished, then the several states must incorporate into their laws the essentials of correct school administration as herein defined. An unrelenting war must be waged against any and all forces which seek to use the schools for selfish or personal ends; the public conscience must be aroused to the vital necessity of adequately protecting these mighty interests, and the influence, stimulus, and aid of the state, in co-operation with all local agencies, must be exerted to its full capacity in protecting and prosecuting the state's educational affairs; and, when necessary, the full power and authority of the state itself must be asserted to strike down any individual or organization that would do violence to such a sacred right and trust as the education and training of the children who are to become the future citizens of this republic.

B. THE UNIFORM MINIMUM CURRICULUM WITH UNIFORM EXAMINATIONS

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1. A definite plan of school administration is proposed for our consideration; one immediately applicable to New York state, but representative of inclinations in many other sections. In brief, so far as instruction is concerned, it is this: (1) *uniform examinations* set by the state authorities,

as a means of acquainting them with the status of the instruction; (2) a *uniform curriculum*, which shall be the basis for these uniform examinations; and (3), since the curriculum often contains too much subject-matter, a reduction of the amount required to the minimum, thereby establishing a *minimum curriculum*.

2. Whether this plan, or some other, is followed, is a matter of tremendous importance for education, owing to the rank of the curriculum in any system of schools.

Coming from the higher officials of a system either directly prepared by them, or prepared under their supervision, it is necessarily an expression of their prevailing theory and attitude touching instruction. Again, being a statement of the material with which the classroom teacher starts in planning her daily work, its character must greatly influence her attitude toward instruction and her method of imparting it. And finally, being the subject-matter on which examinations are based, it must greatly affect the quality of the questions put. Uniform questions based on a uniform curriculum can scarcely represent a higher plane than the curriculum itself represents; and they are likely to represent a lower one.

The importance of this last fact deserves emphasis. When, for example, a curriculum shows indifference toward good organization by the careless way in which the subject-matter is arranged, questions testing excellence of organization are not likely to be prominent in the uniform examinations. This is true for two reasons: first, the higher authorities who are finally responsible for the curriculum, having manifested their indifference toward organization in that task, are likely to manifest the same attitude toward it in their questions; second, even if they wakened up at this point and tested pupils severely in the organization of ideas, the teachers, having taken their cue as to the importance of organization from the curriculum, or at least, having found it too difficult a task to organize the curriculum properly, will not and cannot have prepared their pupils to meet such tests satisfactorily, and the cause of their failure would reflect on their superiors. The same outline of argument will hold for any other large element of school work, such as the consideration of the relative values of facts, or the ability to use facts. If the curriculum has not been clearly planned with reference to them, tests will not be applied on them; in short, examination questions are not likely to rise higher than their source, the curriculum.

The kind of curriculum adopted, therefore, in any system of schools, is a matter of enormous importance. According to its nature it reveals the prevailing tendencies among the higher officers of instruction; it shows what confronts the teacher as she plans her presentation in detail, thereby much affecting her spirit and her method; and it limits the character of the questions her pupils must face at the close. It is the key to any system of schools, determining the spirit that pervades it.

3. What plan, then, should be followed in working out a curriculum?

To an onlooker, that which has been proposed, namely, a uniform minimum curriculum with uniform examinations, possesses a reasonableness that is almost striking. In the first place, a curriculum of some sort is necessary for every school; there would be chaos without one. Some of us remember how, in the dark ages, we taught school without any curriculum at all. And we will readily agree that we never want such absolute freedom again. Freedom under the law—in this case, under a curriculum—is the preferred kind. In the second place, examinations of some sort are highly desirable from the point of view of higher officers of instruction, of teachers, and of pupils. Thirdly, there is certain subject-matter that every person must know, such as beginning reading, writing, the four fundamental operations in arithmetic, spelling, and a few facts from geography, history, and some other subjects. Then there is certain other subject-matter in various studies that is highly desirable for everyone, even tho not absolutely necessary. Why not, then, form a curriculum from these two kinds of matter, making it uniform, since all ought to have it; and reducing the amount until even the average child could master it with ease, making it a real minimum? Is not this the plan that we ought to agree to here?

4. In so vital a matter, the answer must not be a guess. It must be decided by subjecting the proposal to the surest standards for judging its worth that we have, i.e., the aims and principles of education. The very object of establishing these aims and principles is that they may prove useful in this way. It is odd that we are little accustomed to applying them as standards to the making of curricula; but that reveals our need all the more. For without them what means have we for judging how skillful we have been in performing that task.

Moreover, we are accustomed to measure skill in classroom teaching by these standards; and since the teacher takes up the curriculum, for presentation, at the point where the curriculum-maker leaves off, presumably in the same spirit too, it seems fair to assume that the two are working for the same ends and subject to the same controlling ideas. Indeed, they would have to be; for, otherwise, they might easily defeat each other's efforts frequently. It can hardly be questioned that curriculum-makers are related to classroom teachers much as dealers in building materials are related to workmen on a building. The dealers and workmen are subject to the same specifications, the dealers sending lumber, stone, brick, sand, etc., to the appointed place, shaped up and quantitatively determined so as to correspond to those specifications in the large; and the workmen modifying and adopting these in detail to correspond to exactly the same specifications.

5. Assuming this parallelism, let us first see what specifications the classroom teacher is expected to follow, and her method of doing it. Then we will consider the extent to which the uniform minimum curriculum and uniform examinations aid her by showing regard for the same standards.

(1) On the one hand, the modern teacher must know the individual pupil. The principle of apperception defines teaching as the process of adapting, or adjusting ideas to the original nature and acquired experiences of each pupil. His characteristics are the sole basis on which the educator can build, and she must recognize them as such, just as the gardener must recognize the nature of a plant as vitally affecting his method of cultivating it. That being the case, she must in class observe her pupils individually, rather than as a mass—as forty ones, say, rather than as one forty. And as a test of this tendency, the skillful supervisor over her notes the direction and character of her glance, to see whether it is a blank stare at the group as a whole, or a quick study of this particular pupil and then of that one.

And both in class and outside, she is a student of the individual child; of his native tastes, aptitudes, and abilities, including the rate of progress of which he is capable; and of the contents of his mind, as determined by his past experience, his present home life, and his other local environment. In brief, distinguishing one pupil as fully as possible from another so as to get the full sum of qualities that make up each person, she is on the constant lookout for differences among her children.

(2) On the other hand, she must also make a study of the ends that should be realized in the education of each pupil, as determined by society. Her object in studying the individual is to acquaint herself with the psychological facts that condition the development of each child; and now her object in studying social ideals is to determine the direction in which these individuals shall develop, the main qualities or habits that society finds most desirable in good citizens, and hence, most important in a good education.

Very prominent among these she finds the following:

(*a*) The habit on the part of each pupil of setting up, or fixing upon ideals or purposes, varied enough to represent the leading phases of life; lofty enough to be worthy of being realized; and intense enough to be a source of much energy.

(*b*) The habit of judging wisely the value of facts as they are related to the accomplishment of such projects or purposes, emphasizing and discarding according to need.

(*c*) The habit of organizing facts around these purposes, grouping them in proper sequence for the sake of clearness, and massing them in sufficient number to establish conclusions with force.

(*d*) The habit of using the knowledge acquired until its control has become easy, and until some of it—a comparatively small part—has become automatically useful.

(*e*) And, finally, the habit of taking the initiative and showing a good degree of independence in general, in doing these several things.

(3) Here we have the specifications fixed by modern educational theory that the classroom teacher must follow: psychological on the one hand, stating the basis of all her procedure; and sociological on the other, declaring the ends to be attained.

The curriculum comes in now as a mere instrument; it is the material by which she shall develop the pupil from his present status

to a realization of those things declared by society to be most fundamental in an education.

6. Note, now, her prevailing thoughts, and her way of using the curriculum, as required by these principles and aims.

First of all, it is her duty to develop habits, certain right habits of work. These are so important because they are the only guaranty of real assimilation of knowledge. It makes little difference how much ground one covers, if one covers it in the wrong way. Quality of work, in other words, is a far more important consideration than the quantity. Yet, if one works in the right way, one is almost sure to have mastered a fair amount.

Second, each study must be intimately related to the pupil—to each pupil, just as far as possible. It is expected to appeal to his ambition and establish purposes within him; to give him practice in judging the relative values of facts as they bear on these purposes, which would be impossible if he sensed little value in the projects or purposes themselves; to lead him likewise to organize data, use knowledge frequently, and do all these things largely on his own initiative and in an independent way.

At the same time, the specifications require that each study be intimately related to social life, for the pupil must be setting up purposes, weighing values, organizing data, using knowledge, and exercising initiative in all these respects along lines or in reference to topics that really count in daily living.

These two demands are difficult to satisfy; but observe how admirably teachers are meeting them here and there.

For example, the questions are raised in physiology and hygiene:

What are the uses of food in the body?
How keep the digestive organs in health?
How care for the teeth?
How take care of the nervous system?

In Geography:

What are the causes of the awful famines in India, and how might they be avoided?

How has China managed to conserve the fertility of her soil, after four thousand years of cultivation, while much of our own is suffering from sterility after less than one hundred years of cultivation?

What are the prospects for China's becoming one of the world-powers in the near future?

Why do England and Germany import a great amount of nitrate of soda from Chile, while the United States does not?

In arithmetic in the early primary:

How read the street numbers, and house numbers about us?

How use money for travel on street cars?

What quantities of milk and cream are commonly bought? Make out bills for given amounts.

How keep score for the game of bean bag, dominoes, etc.? Make out such scores.

In history:

What has been our treatment of the Indians; and what seems to be our plan in regard to them for the future?

On what occasions has the union of our states been threatened; and is it now permanently established?

These are mere examples. In all such cases the instruction centers, as far as possible, in problems that are vital to society, and at the same time vital to the pupil. The idea is that a study is ideally a sum of live questions, alive both to the adult and to the child; and that a good course of study in any branch of knowledge is a sum of such problems along one great line of interest, organized in good sequence and containing data enough to furnish satisfactory answers to the problems.

The one striking fact about this conception is the complete subordination of the subject-matter of the curriculum to the psychological condition of the pupil on the one hand; and to the purposes fixed by society on the other. And the curriculum is not mere raw fact, nor mere science even. The unit of organization being a practical question, so much of science is included as is necessary for answering it forcibly. Instead of being mere raw fact, therefore, the curriculum is truth selected and organized with reference to the bearings on life.

7. We see the standards to be realized by the classroom teacher. She can never meet them adequately, because they presuppose too much; they demand a thoro knowledge on her part of each of her pupils, and of the social problems about her; then a thoro knowledge of each study taught by her, as to its scientific content; and the ability, time, and energy to organize it around individual and social interests.

It is of the greatest importance, therefore, that the curriculum which confronts her, as she makes her daily preparation, shall aid her as effectively as possible, both by encouraging her thru the spirit in which it was evidently conceived, and by directly assisting her thru adapting in large the subject-matter to the standards which she must try to realize.

8. Now turn to the uniform curriculum, and see to what extent it satisfies these demands. Consider, first, its provision for individuality.

(1) The teacher's unit of study, as we have seen, is the individual child; and one of the great regrets everywhere is that the size of her class, usually forty or fifty, greatly limits her ability to give proper attention to each.

To what extent does the uniform curriculum come to her aid at this point either in spirit or by positive suggestions? Not at all. While the teacher recognizes fifty as too many, the maker of the uniform curriculum will prepare a curriculum for seven hundred thousand without embarrassment.

The average child is the only child considered; and no number of children is too great. Listen, for example, to the first paragraph in the course of study for elementary schools in New York state, dated 1910:

In determining the work of the elementary schools, a six-year course has been prepared. This course is general in character and adapted to all children until that period of their development when they manifest different interests, mental powers, and tastes, which is usually at the age of twelve.

On the whole, then, the six or eight hundred thousand children of New York state are alike, in spite of the teacher's impression to the contrary, until they are twelve, and one curriculum will do for all.

But a curriculum covers several grades and is intended for at least a whole school. The individual school is the unit for the curriculum-maker's attention, as the individual child is the unit for the classroom teacher's attention.

Now schools as units differ from one another strikingly. They differ in the nationality of their children, in their home lives, in their geographical environments, in the abilities and aptitudes of their teachers, in their traditions; and in consequence, they differ both in what their pupils can understand and appreciate, and the rate at which they can advance.

For example, in a certain school in a very congested district, three-fifths of the children are Italians and two-fifths Jews, and one hears very little English in the streets in that section. About one-half of the children, and most of the parents were born abroad, and practically all are absorbed in small retail business.

In another school belonging to the same system, the children are nearly all Americans, belonging to well-to-do refined families, with the professional element prominent and living in large apartments or separate houses. In a third school of the same system, the children belong to a class between these two in advantages and culture, living on the outskirts of the city in small houses, with many vacant lots, and on two sides of the school woods and swamp land stretch out nearly as far as one can see.

Nature-study should vary greatly in these three schools. So should the home geography; so should the music, in the songs that are selected, and so should the emphasis on parts of the English course. These, and many other variations which would come to light on closer knowledge, would be required by the local environment and past experiences of the children. The rate of progress in the same subjects would naturally vary, too, according to the nature of the children. Again, some of the teachers cannot but do more harm than good in teaching nature-study, even tho they conscientiously try. Most have their strong and weak points, which must fail to be provided for when all follow the same course.

Even in a system far more homogeneous than this, the differences are still striking. For example, in one such system the single fact that 36 per cent of the pupils are retarded in one school, while 51 per cent are backward in another, strongly suggests a radical fault either in the uniform curriculum or the rate of progress.

Yet the uniform curriculum makes no provision for all such differences. It ignores all individual qualities and local conditions.

(2) Turn next to the social standards that are the guide for the classroom teacher; what provision does the uniform curriculum make for realizing them?

As we have seen, the teacher endeavors to organize her subject-matter around live social problems, so far as possible alive both to child and adult. By this means, the pupil will be identified with social issues in a way that must affect both his aims and his whole method of work. To what extent does the uniform curriculum aid her here? Again, not at all. This social basis for the organization of topics, while varying less than individual schools differ from one another, since many of the social issues are national, will still vary much according to locality. Many of the social problems recognized as pressing in the Bowery section of New York City, and worthy of attention in the schools there, are not equally pressing upon the upper west side. But the devotion to uniformity that takes no notice of the psychological differences between schools will hardly allow much concern for the varying social problems that vex different communities or much interest in organizing the subject-matter around these. Devotion to uniformity deadens one to psychological and sociological variations alike.

(3) But if the uniform curriculum shows little concern for either of these, what is it concerned about? In reply, let me ask what is left after you have abstracted your subject-matter from the relation to particular individuals on the one hand, and to society on the other? What have you more than the most abstract subject-matter?

For instance, the following statement is taken from the introductory suggestions for the curriculum in arithmetic for New York state, p. 29:

> While drill in the facts of number during the early grades should be largely in the abstract, with few if any problems, it is suggested that some concrete work in these combinations be given. Illustration: Five dollars and four dollars are how many dollars?

How strong is the disapproval of abstractions here when the need for concreteness is recognized as slight, and the illustration of a concrete example is itself strikingly abstract?

It must be admitted that this quotation is somewhat exceptional, because the devotion to uniformity in New York state is exceptional. But take the case of grammar in New York City. That subject is begun in grade six; and first in grade eight do we find the direction, "In this grade emphasis should be placed upon the connection between composition and grammar." Evidently, during the sixth and seventh school years there, the need of concreteness is not thought to be pressing. Any study that includes only such subject-matter as can be taught to all alike is almost bound to be abstract and formal. Even home geography, for example, stripped of most local relationships, becomes mainly location as outlined in many of our present curricula; and nature-study becomes the mere naming and describing of plants and animals.

In other words, the attention being centered on subject-matter alone, the curriculum is not applied science, approached from the point of view of its human relations and organized into units called problems. It is science itself, called pure because it is undefiled by relation to man, and organized into scientifically named topics.

And where science seems too heavy a diet for children, its mere fragments—unorganized, and, if possible, more abstract, therefore, pure fragments—are offered. Witness, for illustration, the present course in geography in Philadelphia for the third and fourth grades, which is nearly all location. It is enthusiastically condemned by both superintendent and teachers, yet it is fairly representative of many others.

This devotion to mere uniformity does not stop with subject-matter either. If uniformity of content is so good, why should not the method of mastering that content be uniform, too? And so we find in the uniform curricula for New York state, New York City, and other places, direct suggestions about teaching all literary selections read for appreciation, in a certain way; all literary selections, read for composition purposes, in a certain other way; and all continents, countries, etc., in geography, according to a certain list of topics arranged in a certain order.

What does all this signify but a complete subordination of the pupil to subject-matter, instead of subject-matter to the pupil? Complaints are often heard against the fresh college graduate who teaches in the high school, that he sets his subject above his pupils. Certainly the complaint is justified. Yet his point of view is exactly that of the one who stands for a uniform curriculum.

The uniform curriculum, therefore, not only makes no provision, either in spirit or by positive suggestions, for satisfying, in large, the demands that the classroom teacher must meet; but the position that it represents—that of subordinating pupil to subject-matter—is exactly the one against which teachers have most often to be warned.

9. What is the influence of "minimum" in the term "uniform minimum curriculum"?

Minimum refers to quantity. To the extent that the word is made prominent, it calls attention to the ground covered, rather than to the quality of work done; and its very meaning forbids the omission of anything.

All this would not be so bad as it might be if the amount were small. But that has not usually been the case, nor is it ever likely to be. The reason is simple. The minimum curriculum is generally the smallest amount with which the majority of pupils may be allowed to escape. It would be too bad to give them less than they could do, it might spoil them; so they are given more than they can do. "Our courses of study," says Dr. Ayres in *Laggards in Our Schools*, p. 5, "as at present constituted are fitted

not to the slow child or to the average child, but to the unusually bright one." When the people who determine the curriculum are not held in check by the closest possible touch with particular children, they are almost bound to make a minimum curriculum that is in fact a maximum.

The minimum curriculum, therefore, tends to emphasize mere quantity, to oppose omissions from that quantity, and to demand a quantity so large that it is inimical to reflection. All this reveals a still higher degree of indifference, on the part of the curriculum-makers, toward those standards that the classroom teacher is desired to attain.

10. Finally, what aid toward the realization of her standards do the uniform examinations bring to the teacher?

Being uniform, they ignore all individual conditions, and being examinations of much importance on a fixed quantity, their influence is strongly opposed to any additions to this quantity by the teacher for the sake of fuller adaptation—particularly since the amount is already too great.

Furthermore, since examination questions must partake of the nature of the curriculum on which they are based, like the curriculum in this case, they must test almost exclusively on abstract or cold facts. That is, they will not examine on the ambition and purposes that the instruction may have inculcated in the children; nor consequently upon their ability to organize data with reference to such purposes; nor upon the relative values of facts as related to their purposes; nor upon their power of initiative in handling facts. For, it must be emphasized, a curriculum selected without reference to certain children and to certain live social questions makes no provision for questions of this sort. In other words, such questions will not, in the main, test the child's attitude toward knowledge—the effects instruction has had upon him, and the habits it has inculcated; but rather the amount that he holds, his storage capacity. There is no aid, then, in uniform examinations for the realization of the teacher's purposes.

It is clear that the whole plan of a uniform minimum curriculum, accompanied by uniform examinations, ignores the teacher's standards.

11. But the word "ignore" is not strong enough. For, since the curriculum is the very key to our educational system, a bad curriculum, with its bad qualities emphasized thru uniform examinations based directly upon it, will accomplish a limitless amount of positive evil.

Consider some of the effects when such a plan is put into operation.

(1) First of all, the curriculum fails to fit. The teacher must be rated by what she accomplishes for this and that child. The individual child is the basis of judgment in her case.

A curriculum is a thing that concerns a whole school, as we have said; we speak of the curriculum for this school and for that school. The school, therefore, is the unit of judgment for a curriculum. But the uniform minimum curriculum fails to fit any particular school. There is no pretense, even by its makers, that it does fit. No plan was followed even aiming at

such a result; indeed, the plan pursued practically excludes even the possibility of an accident of that sort.

At the same time, a cursory study of such a curriculum with reference to any particular school will bring to light numerous desirable changes. It would be easy enough to improve it, for that school; and so for every other, taken individually. And the changes are sadly needed too. Yet they are forbidden; first mildly, in the emphasis on uniformity as desirable; then more forcibly in the emphasis on a minimum quantity; and, finally, with a club, in the form of examinations based on that exact subject-matter.

What is the result? We see it now in New York City. A few of the bolder spirits, principals, petition their supervisors for permission to modify the curriculum to meet the needs of their individual schools. Adaptation to particular situations becomes, in other words, instead of a requirement, a matter of special permit. The rank and file, however, lacking the spirit of martyrs, submit, and subordinate the school to the curriculum rather than the curriculum to the school. And when once submission is secured, there is small limit in the extent to which uniformity becomes meritorious. For example, in one school that I know, six classes in the fifth grade have exactly the same work allotted for them in each subject, each week—some 250 children there in a lockstep. The tendency in that direction is strong thruout the city, and no reproof for it has come to my knowledge.

Fully half of our states, I suppose, have uniform curricula, and I am aware that the representatives from many of them will hold up their hands in holy horror at the above practice. Nevertheless, this is what they are headed for. The main reason that they have not already arrived at this point is the fact that their systems have not yet had time to become so highly organized as some of those in the East.

(2) What is the effect of this general plan upon the young trained teacher—a most vital question, since the hope of our elementary education rests largely in her?

She takes her position in such a system keenly alive to the worth of the individuality of her pupils, and hopeful of developing it toward social ideals. She is given a curriculum, as a means, that shows no regard for her particular children; no tendency, either, to organize facts about such social problems as might give the facts value in their eyes. Yet she strives to correct these defects by making small parts over again, laboring more than the allotted eight hours per day, for that purpose. Then she discovers that in her reorganization of topics she necessarily omitted some things and added others, and that the minimum curriculum, as well as the uniform examinations based upon it, makes both changes dangerous. In addition, the examinations impress her with the thought that knowledge, rather than right habits, is the main thing to strive for, and she asks, Why, then, strive for more?

As she delves deeper, she discovers the real philosophy underlying the plan. The uniform minimum curriculum, with uniform examinations, is necessary in order to surround the poor teacher with so many limitations that she cannot go far astray. And since uniformity is a good thing, all are treated as poor teachers. In short, if the individuality of children is to be developed, the best way to get it is to suppress its expression in the teachers.

What wonder if she becomes discouraged; if the aims and principles of education gradually become dimmed in her vision; if the uniform tests finally determine the scope of her interest and her plans as a teacher; and if she looks back upon her early enthusiasm as a totally outlived past, just as many a person looks back on his honeymoon?

This is the history of many a teacher in systems where the organization is highly enough developed to cause the uniform curriculum and examinations to be taken seriously.

It is true that teachers will make mistakes—even the best of them. But no mistake can be greater than that of the higher educational officials, when they refuse teachers the opportunity to make mistakes by putting them into a straight jacket. Mistakes necessarily go with freedom; and educational systems have got to be founded on trust of teachers, not on suspicion. Want of trust in employees is bad enough in a factory; hardly defensible even there, where a mechanical product is the aim. But schools are not aiming at mechanical products; they are aiming at devotion to ideals, right mental habits, assimilated knowledge and independence; and we'll never get pupils to show these qualities until teachers are showing them abundantly in their consciousness of freedom.

We have said that the curriculum is the key to an educational system. Let me ask my opponents how the uniform minimum curriculum, with uniform examinations, provides for the freedom and the growth of teachers. Again, the classroom teachers are the only persons in the world who have most of the knowledge necessary for making curricula that will fit. What provision is there in this scheme for bringing it into use?

(3) Finally, what are the effects of this plan upon the higher officers of instruction themselves?

Their primary duty is to encourage and improve teachers; that is, to lead them. But they are constantly tempted away from instruction to business matters. And our population is growing so rapidly that this temptation becomes powerful. The only thing that can save them, and provide for their own growth, is rigid subjection to standards of skill in strictly professional tasks. And in connection with the preparation of the curriculum—or the supervision of its preparation—they have their best single opportunity to apply such standards to their thinking.

How is this opportunity improved, in the case of the uniform minimum curriculum, with uniform tests? The opportunity is not improved. Indeed, the position that the plan requires is fundamentally opposed to

modern educational theory. It is opposed to it in its neglect both of individuality and of the social functioning of knowledge as well. It makes the work of preparing a curriculum comparatively easy by leaving out the very standards that test excellence. And in doing that it places the higher officials out of sympathy with the viewpoint of their better teachers, and practically in opposition to them.

And the result is, not merely that our curricula consist of the rawest material, entailing impossible work on teachers before it is presentable to pupils; not merely that our method of curriculum-making lags generations behind our classroom method; but that, notwithstanding the many defects among the rank and file of teachers, our educational systems themselves lack professional leadership.

In conclusion, there is a large place for uniformity in an educational system: uniformity in business matters; uniformity of aims and principles for the school as a whole; uniformity of aims and principles for particular subjects of study, and uniformity in many practical matters touching instruction. But uniformity in the subject-matter of instruction, and in tests upon it, is condemned outright by modern educational theory.

DISCUSSION

A. B. POLAND, superintendent of schools, Newark, N.J.—While I am disposed to view the subject of uniformity from the standpoint of the able paper read by Dr. Finegan, I can agree perfectly with Dr. McMurry in most of his contentions. I cannot, however, agree to the latter's statement—if I understood him rightly—that the central purpose of education in public schools is to develop individuality. If Dr. McMurry had said the central purpose of education is to develop individuals, not individuality, I could fully concur. The fallacy in the statement lurks right here, in not defining specifically what is included in the term "individuality." Admitting that certain individual characteristics should be cultivated, the general aim and purpose of education, as I conceive it, is to develop not individuality but social unity. My plea, therefore, is not for individuality but for unity which results in efficiency and is rarely, or never, attained except by and thru uniformity of some kind.

Baron d'Estournelles de Constant, peace delegate to the United States from France, speaking before a mass meeting of school children in the Metropolitan Opera House, New York, made this remark: "Disagreements among nations, which sometimes lead to war, often originate in simply a misunderstanding of one another's viewpoints." It is important in this discussion that we agree upon the meaning of the terms employed. Thus, by uniformity of standards in school administration, we do not mean identity of standards. Uniformity is a relative term. It admits degrees. There is no such thing as absolute uniformity. Uniformity, for instance, may be predicated of the school systems of St. Louis and Boston, unlike as they are in many respects. Both cities have relatively small boards. Both cities have boards elected at large. Both cities differentiate executive from legislative powers. In these fundamental and typical characteristics there is uniformity, while in many matters of less fundamental importance there is wide variety. Uniformity, as in nature, may exist amid infinite variety. The well-understood distinction of genus and species suggests what I have in mind.

Again, uniformity must be distinguished from unity, which is essential oneness. Unity differs from uniformity in being an end in itself; whereas uniformity is merely a

means to an end. That uniformity is an essential means is proved by the fact that unity in government is never secured except thru uniform laws; unity in church matters, except thru uniform creeds and rituals; unity in business, except thru uniform rules and practices; unity in any institutions whatsoever, except thru uniformity of some kind. Just so far, then, as unity is itself desirable, uniformity is a *sine qua non*. That uniformity as a creative mode is universal may be inferred from Genesis, chap. 1, where we read: "In the beginning God created the heaven and earth. And the earth was without form and void." To make of this chaos a place fit for man, the Almighty found it necessary to set in operation certain fixed "laws of nature," such as gravitation, chemical action, etc., which are known to be uniform.

Uniformity is likewise the creative principle in the moral and spiritual world. Listen to the words of the Great Teacher: "All things, whatsoever ye would that men should do unto you, do ye even so unto them." Observe that we find no alternatives embodied in this moral precept, but instead a single, uniform rule of action eliminating all differences of nationality, color, age, sex, and of educational qualifications. It aims at unity—unity with God, wherein all individual differences may eventually disappear.

A priori reasoning as well as scientific evidence leads to the conclusion that all progress is derived *sub specie uniformitatis*.

How uniformity is secured—its rationale.—For illustration, take the uniform child-labor law now being actively promulgated in several states. All agree that there exists a need for the protection of children from the evils of being put to work prematurely. The facts are:

1. That parents desire to exploit the labor of their children.
2. That employers are willing to profit by such exploitation.
3. That certain industries require child labor under present conditions to meet competition. Thus, for instance, the glass manufacturing industry across the river in New Jersey cannot be carried on successfully, it is claimed, without employing child labor, because here in Pennsylvania and in certain other states such labor is permitted.

Since appeals made to the conscience of parents and to the humanitarianism of employers have so far failed, it is obvious that the only remedy for this unfortunate situation is the enactment of a uniform nation-wide child-labor law.

Again, in the year 1904, the Public Education Association of this city, dissatisfied with the conditions that existed, invited President Eliot, of Harvard University, to come here and to propose how the public-school system of this city might be improved. President Eliot suggested:

1. A small board which should confine its powers to legislation.
2. That executive functions should be left wholly to experts, that is, to the city superintendent and his staff.
3. That matters of finance be in the hands of the board with a graduated, predictable income determined by law.

These principles, he said, had worked out successfully in certain other cities where they had been tried. Why should they not work out successfully in Philadelphia? So thought the people of Philadelphia, and the necessary legislation was finally secured. Philadelphia is now pointed to as a city whose public-school system is among the best in the country. This result was obtained thru conscious imitation, the genetic term for uniformity.

In the address of President Eliot on the occasion I have alluded to, he made this significant remark:

> The public-school systems of our great cities have done a great work, and by comparison with other branches of public service are the most successful of our American institutions.

This is great praise from a high authority. A few days ago I wrote to President Eliot asking whether his statement made in 1904 still holds true, and he reaffirmed it.

One of the reasons for this remarkable success of the school systems in great cities, as compared with other institutions and with school systems in rural districts, is that we have consciously and progressively patterned after one another; that is, have attained to a greater degree of uniformity.

Democracy emphasizes uniformity; its fundamental thesis is that "all men are created equal." Aristocracy is based upon the negative assumption; it emphasizes individuality. Is not the attitude of mind exhibited by the ultra-"individualists" in our profession a survival of the old aristocratic régime? In a political and social democracy such as ours, children must be taught to live and to work together co-operatively; to submit their individual wills to the will of the majority; and to conform to social requirements whether they approve them or not. To inveigh against uniformity because it sometimes works injustice is of a kind with Madame Roland's apotheosis of liberty: "Oh, Liberty! Liberty! How many crimes are committed in thy name!"

To condense this discussion into a single paragraph:

In seeking to attain definite ends in education, progress and uniformity go hand in hand. So long as we attempt to reach the same end by different ways, we simply admit that the best way has not yet been discovered. But once the best way is discovered there is no excuse for using any other unless we err voluntarily for the purpose of maintaining diversity.

E. C. Moore, professor of education, Yale University, New Haven, Conn.—It is evident that there is no uniformity of understanding in regard to the subject of this discussion. One side contends for much greater uniformity of school administration. The other for much less uniformity and rigidity in courses of study and in instruction. I agree with both of them and I agree so heartily with each one that I cannot say which I favor the more. What we have had set forth here today is in a sense a picture of the inadequacy of American school conditions. Where there should be organization, system, rigidity, like a belt of unyielding armor plate to protect the children inside the schools against the forces which would destroy their right to an education, there is no adequate system for insuring educational security; and inside the school where there should be the maximum of adaptation, consideration, modification to meet local and sectional conditions and adjustment to individual need, there tends to be far too much rigidity, uniformity, and regularity of procedure.

This is an old trouble in human affairs. The problem of government is how to organize to get the proper degree of security and yet not by overorganization to kill life and individual freedom. Men used to reckon with government as a uniform necessity and hew the people down to conform to it. Now government is built up from the other end. The people make it to serve their needs. Localism in lawmaking is preferred to uniformity, and when the laws are made, tho they are no respecters of persons, there is one whole branch of government whose duty it is to fit them to individual needs. Medicine aims to be a body of well-established principles, but the treatment of diseases consists in fitting these uniform principles to individual cases.

There is no uniform meaning to the word uniformity, and more than half its meanings are vicious. No two leaves on the same tree are uniform, and no two human beings are alike, nor can any one of us be treated from moment to moment as unvarying. Machinists tell us that no two machines of the same make behave in just the same way or require just the same amount of care and attention. While they are superficially the same, each develops its own peculiar friction, its own flaws. The most expert engineer is not able to make them develop the same power, or work on the same amount of oil, or last for the same number of days. The human machine is infinitely less uniform. Variety and diversity seem to be its law and its essence. To subject individuals to unvarying uniformities is to treat them unhumanly. A good engineer would not expect to deal with his machines in that fashion. Some people believe that there is only one right way to

do anything and all the other ways are wrong. Mr. Kipling did not agree with them when he wrote:

> There are nine and sixty ways of making tribal lays
> And every one of them is right.

It is altogether likely that there is no one uniform and eternally right way of doing anything. The right which is not merely an abstraction is always a function of a situation which is individual and will never repeat all its details in any other situation. But while situations are all different in details, and individuals and even machines are different and call for different kinds of treatment, situations are also like other situations, and individuals like other individuals, and machines like other machines. There are uniformities in them all, and if we take these uniformities as only parts of what we are dealing with and not the whole thing, we shall find them useful. When we overdo them they are not useful. The United States government finds it useful to uniform its soldiers, but if it attempted to put a uniform amount of cloth into each soldier's dress the result would be unhappy. It applies the principle of uniformity where it belongs, and when it is kept to its place the principle is helpful. Just so in education. School systems ought not to be alike or to expect to be alike in the details of their administration, but they ought to be alike and they must be alike, in being free to serve the educational needs of the children; and to be free they must be independent of local political government. Public education must be a state affair and not a village affair, or a town affair, or a city affair, for upon the welfare of that education the being of the state depends. And as President Wilson has put it, "No instrumentality less universal in its power and authority can secure popular education." In building our school structure, we must put the steel frame and the protective walls on the outside and leave the internal part free for adaptation and readaptation to individual needs. I am completely convinced that the schools must be uniformly protected by being made a part of the administrative system of the state, and that where the laws have already done this, there must be no failure to carry them out. With regard to uniform statistics, much is to be gained by them if they are based upon uniform standards and do not bring confusion by giving a uniform appearance to dissimilar things. To make them comparable they must be based upon a common unit such as the cost per student-hour of instruction. Uniformity in business procedure is not altogether desirable. Even the commonly accepted uniform requirement that all bids shall be let to the lowest bidder results in harm unless the lowest and best bid gets the contract. It makes man for the business and not the business for man.

Uniformity in courses of study and in textbooks is destructive to young lives. I am one of those who believe that those schools are on the right track which are doing the utmost for the individual child. No more uniformity than the minimum which is required to organize instruction so that it can be carried on is desirable. A school system can be managed with a very little uniformity, with much less than some of us think. I am satisfied that there is no subject that every child must take year after year whether he succeeds in it or no; that it is vastly more important to have a mentally alive child in a schoolroom than a dead subject any time; that we make a mistake when we define education in terms of subjects in place of in terms of the mental activity of children. What we seek is to help children to use their minds. The quantitative formulation of courses of study makes war upon this conception of education. The course of study must be made, then, not on the basis of pages, but on that of subject units: not quantity of work, but quality of work, is what we want. To get and keep a living and expanding interest—a searching, reflecting, organizing, using activity going in young children—it will be necessary for each school to meet them where they live and to vary its instruction to reflect the activities and opportunities of the place in which it is given and the traditions of the homes from which the children come. This work of providing a local and individual mental dietary can be done only by those who are in a position to make the necessary local and individual diagnosis, which must precede it. This conclusion is not in conflict with the

view that education must become a science by developing a body of thoroly proven principles or norms of instruction. As in medicine, these principles will have to be interpreted to each case by means of personal diagnosis. Lacking these principles, as we do as yet, the present need for diagnosis is even greater than it will be when we get them.

Let me give just one illustration of the great advantage of using diagnostic and experimental methods rather than uniform methods in education. I take it from Newton Mass., a school system whose energy is directed to adapting subject-matter, methods, and organization to the needs of the individual child. Pupils enter the high school in Newton when they are old enough for the high school; to have succeeded in finishing the grammar-school course is not prerequisite. And when they are in the high school they take the studies which are suited to their needs. "But having failed, don't they continue to fail?" you ask. Not at all. In 1910, Dr. Spaulding, desiring to make as many appeals as possible to the minds of such belated pupils in the grammar schools, promoted fifty average girls from the grammar grades to a special transfer class in the high school. Thirty-five of them had repeated a grade. They were described as "apathetic," "sluggish," "befogged," and "stolid." Where are they now? Forty-five remained to the end of the year. Twenty-seven went on with regular high-school courses, and the others either entered other schools or went to work. In September, 1912, nineteen of these girls entered the regular second-year class of the high school. What do their teachers say about them? "Their work is as good as that of the other pupils and in special cases it is better." "Their work is as good as any, and in some cases it is better." "The average is as good as the average of the class." A similar study has been made of a group of twenty-seven boys admitted at the same time and on the same conditions. Seventeen of them did decidedly better on the average than did the whole class admitted in the regular way. Fourteen of them are now in the second year of the high school, their average standing is several points higher than the average of their departments.

There ought to be as much uniformity in school administration as is necessary to make the schools free to do the purely educational work of helping minds to grow by developing interests in, and becoming active upon, profitable social concerns and ways of adjusting life. Uniformity must be employed to further adaptation and whatsoever uniformity doeth more than this cometh of evil. Medicine was in a crudely empirical stage when men reasoned, This medicine cured my child, therefore it will cure yours; and education is in a crude empirical stage when educators reason, This subject, this procedure, educated my child, therefore it will educate yours. Scientific education will work out general principles or uniformities and apply them only after careful diagnosis.

Edward C. Elliott, professor of education, University of Wisconsin, Madison, Wis.—The central theme of the present discussion would appear to be that of the outer limits for either necessary or desirable uniformity. Commissioner Finegan's general thesis, that a certain uniformity is fundamental to our state policies in education—formulated, as these policies are, upon the principle of equity of educational privilege and opportunity—must, I think, be accepted without argument. Concerning the general extent and specific details of this uniformity, widely different conclusions are inevitable. Commissioner Finegan, for example, insists that the larger social purpose of our elementary education is best conserved by a six-year course "adapted to all children until they reach that period of their development when they manifest different interests, mental powers, and tastes, which is usually at the age of twelve." What a simple problem the care of children in the home and their training in school would be were they so much alike until twelve! Professor McMurry effectively argues against the practical working of such a scheme. These differences are in large part due to that ever-present hindrance in our educational discussions, the ambiguity of the major terms in which we endeavor to express ourselves.

Uniformity of what? The topic as announced specifies "standards"; yet a mere superficial analysis of the situation reveals the fact that there are several sorts of standards —standards of organization, standards of conditions for instruction, standards of administrative and instructional procedure, standards of results, both mechanical and educational. Moreover, these general type standards must be interpreted differently when applied to different specialized fields of school control—legislative, administrative, supervisory, and inspectorial.

The existence of forty-eight autonomous units for the organization and control of our national educational system serves to give an increasing significance to comparison between states. Such comparison has been, and will continue to be, a potent means for the stimulation of progress. The justice and validity of such comparisons depend upon the identity of the data employed. For this reason there is a large need for a uniformity of treatment of certain of the objective factors of our educational scheme. Such elements as the school census (the most defective of all the essential social statistics of education, and which for its betterment might appropriately be transferred to the care of the United States Bureau of the Census), school registration and attendance, and financial accounting lend themselves readily to a uniform procedure. Without uniformity, there is no warrant for comparing the educational economy of one educational area with that of another. A uniform terminology in the certification of teachers would undoubtedly contribute in no small measure to the removal of the confusion that now obtains in this direction.

The list of items about which we might readily agree is after all very short, even tho we limit ourselves to matters of major importance within any state. Rather than debating debatable details, it appears timely to raise a fundamental issue.

The conspicuous trend of today in all of our essential social relations is organization, integration, regulation. Education may not expect to be uninfluenced by the forces making for uniformity, regimentation, and standardization; nevertheless, these forces require a most cautious manipulation and application lest the delicate human balance of education be seriously disturbed. Measures intended to regulate in a uniform way the operation of the public schools are easy to devise. To adapt the institutions of education to these mechanisms is as simple as it is dangerous. Employing a crude figure of speech —an educational shoe for society, built over a uniform last, may appear well and be stylish, but it is apt to pinch and to be painful.

Granting the dominancy of the state over the local community, and admitting the priority of the claims of society and those of the individual, may we not, as a matter of large public policy, regard all uniformity as possessing inherent evils, especially all uniformity influencing the vital relations of pupils and teacher? Is there not a lurking danger in the current tendency to mechanize and organize? The industrial world recognizes as a grave danger the enervation of the worker by the machine. The educational system should likewise recognize a similar danger to communities, teachers, and children. To energize the school means a constant conscious effort to reduce all uniformity to a minimum and not to increase it to a maximum. Every scheme looking toward uniformity contains the germ of self-aggrandizing bureaucracy. Some such bureaucracies may be necessary instruments for the practical operation of our school system, but they should remain instruments and not be permitted to magnify themselves into masters of the education of the child. If we are to capitalize freedom, we must rely more upon those methods and devices that produce freedom. The sovereignty of the state in education is good political theory, but in its application to human situations the fact must not be forgotten that all evolution has come thru variation and not uniformity. The pride of states, of local communities, of schools, should be in an intelligent progressive variability and not in a mechanical regressive uniformity, by whatever alluring title it is known.

DEVELOPING THE CO-OPERATION AND INITIATIVE OF TEACHERS

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The title which I have ventured to use for my discussion implies that there is not, at the present time, a sufficient degree of co-operation between teachers. It also implies that teachers do not exhibit the degree of initiative which ought to be expected of them. Perhaps the best introduction to the positive suggestions which are to be made will be a brief preface in which this critical implication is justified by definite references to various types of cases in which teachers fail to show co-operation and initiative.

Consider for a moment the machinery by which the teacher is usually appointed to his or her position. Some superintendent needs a teacher for the fifth grade. He is likely to be bombarded by insistent recommendations from worthy citizens whose feelings he knows he must respect. These same worthy citizens, thru their representatives on the board of education, have for a number of years made it apparent that no one can be brought into that town to teach so long as there is an unemployed native between the ages of seventeen and seventy. Co-operation of a certain type there is in this case, and initiative of a certain type, but it is not from within the school organization.

Let us go on with our example. This superintendent sets aside, after due consideration, all the local applicants or, as they might properly be called the local insisters, and starts out to get a teacher from somewhere else. Is it not extraordinary that at this juncture the superintendent must go to an agency which has grown up on a highly profitable commercial basis, because teachers have not developed any co-operative method of recording themselves. Who among us has not witnessed the comedies and tragedies of the appointments made thru teachers' agencies? I remember one day last summer how a young man came into my office and wanted a letter in support of his candidacy for a superintendency on the Pacific coast. The fact was that I had been corresponding for a fortnight with the superintendent whose place was supposed to be vacant about a high-school principalship. I extracted from my visitor the notice from a teachers' agency which brought him to ask for a recommendation. The notice contained that subtle phrase, "Do not mention us, but apply." The fact, of course, was that someone connected with that thrifty agency, having heard a half-rumor about something good on the Pacific coast, was lavishly spreading notices with a view to getting, if possible, 5 per cent from anyone who might in the thick fog of competition find a harbor thru the Golden Gate.

Then there is the other case of the timid young woman who comes for advice because some agency has offered her a position, and while she is

trying to decide, another opening comes, and she takes it. "But," says the agency, "we are entitled to some part of this second salary, for were we not offering you a good position on the remote frontier?" I am not a lawyer, or the son of a lawyer, but I have in my day told several young women that I should venture to take such a case before any American court, and I have even gone so far as to guarantee that I would assume the case if it was pushed. I hasten to add that this is not to be construed as a general invitation to all persons in this particular type of distress, tho from the journalistic point of view I should be willing to take on a few such cases. Let me not be misunderstood. I am not condemning teachers' agencies when they do their regular work, for they are in the main legitimate commercial organizations. I am saying that they operate sometimes well, sometimes badly, now and then very badly; the point I am emphasizing is that they exist because there is no constituted medium of information within the teaching profession. The teachers' agency is a kind of vigilance committee in charge of a community which has no organized means of promoting its own internal welfare.

You will recall, however, that we were following the footsteps of a superintendent seeking a teacher. He finds nothing thru his correspondence with the agencies except a batch of letters of recommendation. I am not going to stop to speak of this system of paper credit except to say that, if the banks of this country attempted to do business on letters such as pass between educators, there would be a panic before the exchanges open tomorrow.

Our hypothetical superintendent, doubtful about the letters of recommendation, starts on a journey. If the board of education is wise, it will let him go as often as he wants to, provided only that he recognizes as one of his chief functions that of collecting good teachers. He goes first to prey upon a neighboring school system. I am not going to elaborate this part of the theme. I remember once being in the office of a superintendent when a visitor of the type we are discussing arrived. The superintendent, who was the host on that occasion, received his visitor with the cordial and optimistic remark, "Thank the Lord, our best schools are closed with the measles."

Our seeker after a teacher now goes to a neighboring normal school. Some day when you are surrounded by competition and vexations think for your comfort of the happy lot of the well-established normal-school principal. He is given a territory which is marked on the educational map of the state "exclusive." Colleges and other higher institutions of learning are checked up all the time by competition for students. The normal school is a public institution with an allotted territory. Supervision of the normal school is different—to put the matter mildly—from that of most other public institutions. The local authorities not only have control of an exclusive territory, but they are so superior in reality

or in form to any educational officer in the state that they are practically free from educational control from outside, but political and national control from outside appears on every hand. Our superintendent goes to the normal school and asks for a teacher. There are none left, he is told. Is it possible that the state does not prepare teachers? The answer is, No. At the last meeting of the legislature there were seven bills introduced asking for expansion of the normal schools, and the legislators declared that they were not convinced that the state needed any more such institutions. Anyway the state needed the money for a series of county fairs and for the new state capitol. Teachers used to be found in the good old days in the homes of the state, why all this modern fuss about professional training? Our superintendent condoles with the president of the normal school for a time, and then the conversation turns upon the plans of the school as now constituted, and our normal-school principal tells with pride how the students are most of them coming, under his own stimulating guidance, to take the college course rather than merely to prepare to teach in the elementary school.

Unsuccessful in his search for a member of the teaching profession, the superintendent goes home. He finds that in his absence the citizens have met and organized one of those diversions of modern civic life—a school inquiry. Now a school inquiry is a matter in which a superintendent ought, in my opinion, to be the leader. There ought to be keenness and alertness enough in our profession to see that people want to know something about their schools which they have not tried to find out in times past. We ought to initiate all the inquiries that the country can stand. Not long ago an inquiry was initiated by the superintendent of Boise, Idaho. His school system will profit by his initiative in this matter, and such criticisms as were made—and they were extraordinarily few—were received with gratitude as examples of the best type of co-operation. Contrast this with that other example of school inquiry which is in the minds of all of us. That inquiry seems to me to show what this whole preface, which has run on too long, started to show. Teachers are not organized to promote their professional interests, and they are lacking in initiative to act before someone acts for them.

Please note that the last statement was carefully phrased. That statement does not say that teachers are not organized or that they are destitute of initiative. Teachers are, indeed, organized. We are organized into a national association. We are organized into state and sectional associations. We are organized into federations and clubs. We are organized into principals' clubs and teachers' clubs opposed to principals' clubs. We are organized into committees of thirty-three and nineteen, and all the other numbers down to and including one. No one can accuse us of not being organized. Is it not striking that with all this organization we are so loose and disintegrated a mass? We have in this country

no recognized publication to which the teacher may turn to learn of the best professional experiments that are being tried on every hand. We have no co-operative source of information from which committees in charge of our meetings can learn of the experiences of others who organize similar meetings. We do not have any constituted agency to which boards of education may be referred when they want real expert advice about what they should do. We hear again and again urgent pleas for intelligent co-operation in promoting wise legislation. These pleas are unanswered because we have no organized agencies for the formulation of good codes, nor have we any organization which can promote the interests of good codes when such are formulated.

There is one matter you will note which I have not mentioned. One can always get the sympathy of an audience of teachers by saying in some delicate way that they look as if they were underpaid. One can get resolutions and investigations and support at the state capitol for a campaign to increase salaries. Even here with the idea clearly before our minds that we must have better professional organization, it would require a speaker bolder than the present to recommend that we drop for two calendar years the discussion of salaries. While I should hardly want to put myself in the position of receiving no second to my motion, I should like to suggest to some subsequent speaker that he move as above indicated. It is easy for a pedagog like myself to see that the path of wisdom lies away from economic considerations in the direction of strictly professional considerations, but I must be true to my own pedagogical traditions; I must be timid. If the school board objects to what they call fads and innovations, I, their educational expert, must look cheerfully upon my critics and reply that the cost of living is going up. If the manufacturers tell me that I do not know how to conduct schools, and that they are going to have a new deal and a separate system of schools, I must admit all of their criticisms and ask for a job in the night school. If I see that the children of a city need more teachers and more desks, I must be quiet because I am not supposed to know about civic matters, and furthermore the board might take some steps unpleasant to my family, and then I should hesitate to go home and tell what had happened.

Do the lawyers allow themselves to be managed by outside agencies? No, they have a bar association. This association does not discuss chiefly economic matters, and it does not listen to long inspirational addresses. The bar association collects information about professional matters and enforces its judgments. Why can we as teachers not do something of the same kind? Why should we not set our own profession in order? Why should we not close up the salary issue for a little time and devote ourselves to larger professional matters?

The first suggestion that I have to make is that we co-operate thru all of our state teachers' associations by organizing at central points in

each state complete annotated lists of the teachers who are members of these associations. Let each teacher write inside of two hundred words what he has done, and what he wants to do. This autobiography is to be a public document, accessible to anyone who is looking for a teacher. The autobiography should be supplemented by three card catalogs: first, a geographical index; second, a grade and class index showing where the teacher wants to teach; and third, a record index telling the public pronouncements of any superintendent or board of education who will record judgment. This latter should include also the recorded judgment of the institutions which have graduated the teacher or given him summer courses or other courses. A further index, to be known as the "active" index, might be kept apart from the main indexes calling more immediate attention to the teachers who for any reason desire to be considered candidates for special positions. If properly managed, this list need not be a discredited collection of names, for a teacher in the fifth grade might legitimately desire—as set forth in her own biographical statement—to become a special teacher of music. Other equally legitimate reasons for transfer exist and would in time come to be frankly recognized. There would then be less of the surreptitious candidating in the dark which usually works to the disadvantage of all concerned. The public, co-operative character of this record would lead very soon to the adoption of a new standard of morals in regard to recommendations. We all know too well the kind of recommendation that is given to a departing teacher with a sigh of relief and the knowledge that the recommendation is not in keeping with either the facts or expectations of the writer, but is given to "avoid trouble." The reduction in number of such recommendations is a sufficiently worthy work to justify the life of one reformer.

The advantages of such a catalog of teachers are too numerous to speak of in full. The state association would be given by this method a real mission and a real membership; information about the training of teachers would become accessible; legislation and ordinary thinking about the teaching profession would begin to be based on real facts; foreigners could get some of their questions answered, and your hypothetical superintendent seeking a teacher could find out where to go. The imagination dwells with satisfaction on the substantial foundation which such a card catalog would give to the teaching profession.

The second suggestion which I have to make relates to school inquiries. The teaching profession has a right to the fullest possible knowledge regarding school successes and school mistakes. I am persuaded that the irresponsible attacks of self-constituted judges who know schools chiefly thru their personal observations made in childhood, or thru the even more childish observations, made from the viewpoint of the proud parents, will drive the teaching profession to develop a technic of self-examination which will be of great gain to the professional world. We all feel keenly the thrusts

of these irresponsible critics. But after all these people mean well. They simply fail to realize that education has become an expert form of activity. I remember reading once—I think it was in the preface of my college textbook in ethics—the complaint of the author against the self-constituted critic of other people's morals. "The time has passed," said the writer, "when an untrained man will speak with assurance on matters of science. The time has passed when questions of public policy are discussed with flippancy. But not so with moral matters. The unthinking, untrained critic speaks on these matters with a light heart and an empty mind. Such critics remind us of our first parents of whom it is written that they were naked and not ashamed." When I read the lucubrations of some critic of the schools, who says that all the rich inheritance of modern civilization is to be given to boys and girls without home study, I am filled with pity for the writer, and I am filled with longing for the day when the school board in his home town will invite a group of fearless experts to tell him and his neighbors what their children need. My only regret is that this same board would hardly be in a position under our civilized mode of life to prescribe for the writer himself, since presumably he is over fourteen.

Boards of experts who could help in the auditing of school systems ought to be constituted and recognized by the teaching profession. We have a right as experts to speak when schools are under discussion. Because someone, whom we will call X, has control of the avenues of publicity, shall he make attacks upon the schools and no answer be heard? Time and time again some eager, earnest soul has gone into a community and spent time and energy without reserve in organizing the teachers and the course of study. By and by the educational world has seen that worker discredited and humiliated, and we have had no means of expressing the verdict of our profession upon his work. On the other hand, there are in our profession, as in all the world, boasters, ignorant of the real possibilities of our profession, makers of words, and self-seekers, who have friends on the local newspaper. Such a one never hears the voice of any organized judgment, for there is no one to whom the suspicious board of education may turn for a real judgment. If the bar association is a better agency for the judgment of professional conduct than a jury gathered up in a day, why should there not be recognized, constituted agencies which can be called upon to judge of schools? The Department of Superintendence could render no larger service, I believe, to the country and to the teaching profession than by organizing a series of educational councils with seats in different parts of the country, to which councils all kinds of questions of school policy might be submitted. Have one such council in New England, another for the other North Atlantic States, another for the Middle States, one for the Gulf States, and so on—ten or fifteen councils in all. Make the territory large enough and the personnel strong enough so that real authority shall attach to judgments of these bodies. Select the men from positions which

will guarantee real contact with school problems. Again the imagination runs on with pictures of the advantages which would flow from the studies of such councils. Where a group of people get together and study educational situations they are sober and judicious. Where men work alone and in the presence of intense personal issues they lose their perspective. The teaching profession owes it to itself to organize centers of professional judgment to the end that there may be increasing concord of judgment and increasing power of execution.

Third, I believe that we are in need of an authorized channel of general educational publicity. Let us speak of this matter with frankness and with an eye single to professional rather than personal interests. Today we have in this country a hundred educational publications. Like all the world, some of these are good and some are not. Many have been built up thru the earnest and successful effort of some efficient worker in education. I believe there is now and will always be a field for these journals, at least for the best of them. The Germans have a word which they use in their professional publications; it is the word *Centralblatt.* A *Centralblatt* is a weekly sheet which brings to the specialist in each field a quick summary of the literature and of the most recent movements in his field. This *Centralblatt* is a means of quick and wide communication. I believe we need such a *Centralblatt* in education. I suppose that every other editor shares with the present speaker the ambition that the particular sheet over whose destinies he presides may gradually extend its subscription list and its editorial influence and become the guide of all who teach or administer in all the schools. Painful as is the awakening, however, let us, my fellow-editors, realize that no publication can in this day and age become a *Centralblatt* without the authorization of some great association. There ought to be a *Centralblatt* with such an organization as this behind it and in front of it and all around it. There ought to appear in the pages of such a *Centralblatt* a statement of the best that is going on in Boston and New Orleans and Seattle and Philadelphia. Such a *Centralblatt* might even bring to the hands of an eager world the report of the New York Inquiry, or at least a summary of those parts of that report which are to be privately published. Such a *Centralblatt* could tell all of us what is happening to the Page bill, and what is the next probable place of meeting of the National Education Association.

How shall we get such a *Centralblatt?* I think we may set aside the economic considerations. There are plenty of ways of financing such an enterprise. If you do not believe that statement I will undertake to tell a committee of this organization how it can be done. What is needed is moral support and authorization. Let this Department of Superintendence decide that a *Centralblatt* of education is a good and necessary agency, and the task of giving publicity to American school life becomes a mere clerical matter. Now, mark you, that statement does not mean that the members

of this organization are merely to consent to publicity. They are to decide that publicity is needed. They are to be so clear on this matter that when they open an ungraded class they will not be too modest or too conceited to tell of it. A success in educational organization ought to be given to the teaching profession just as a successful treatment of a patient is reported in the medical journals. Your physician, when he grafts a piece of tissue, does not feel that he is boasting because he reports his success in the next issue of the clinical record. The success of his work is recognized by the physician as due to his compliance with natural law. His success is a scientific discovery. Scientific discoveries are public property, and are contributions to professional efficiency. The physician therefore hastens to give his fellows the benefit of his experiences. He is not ashamed of mistakes or failures. Indeed, he reports these for the benefit of others who encounter like difficulties. This is professional co-operation and we need much more of it in the teaching profession.

I am clear in my own thinking that more good educational experience goes to waste thru lack of publicity than gets written into all the ponderous annual volumes of our general association or in all our scattered and competing educational journals. Why not tell the journals that the best of them would gain thru the organization of a *Centralblatt?* Why not extend the hand of sympathy to the weaker journals with the good advice that they become better? Why not cut loose from the unsystematic, haphazard lack of organization from which we now suffer and set up a real organ of the teaching profession?

The examples of possible co-operation and initiative which have been presented up to this point have had only secondary relation to the classroom where children are taught. It may be well to choose as a final example one that will emphasize the fact that the appointing of teachers, the study of their work, and the publication of educational results are all secondary to the main purpose of the school, which is the adequate training of children. I dare say that every educator in this country feels that the greatest immediate problem of the elementary school is the problem of so rearranging the course of study that it shall meet the very legitimate demand which is made upon us for adequate training of the pupils who are to go out into the trades or into business. We may call the new education "industrial training," or we may call it, if we please, "the enlarging of the course of study," but in any case the effort must be made so to prepare the children who are to go out into the business world that the school activities shall be directly carried over into practical life. Evidences are too numerous to be neglected that we have not succeeded altogether in making the school a true preparation for trade and business. Those who have to deal with the products of our schools have of late become very critical of our procedure. Not only are they coming to us now with criticisms of our schools but they

are saying that the professional educator has not shown ability to deal properly with his problem. These critics have then set themselves up as capable of solving the whole problem. They see a need which is general and they are critical of our work; they would therefore cut away from the present school. It is interesting to note that some of the members of our own professional group sympathize with the view that this industrial problem must be solved by a new set of educators always, of course, including those who have seen the new light. Most of us, on the other hand, believe that there is danger that practical men will overlook some of the considerations that have been drilled into the minds of teachers thru generations of experience. Those of us who have been brought up in the traditions of the school world are disposed, of course, to hold to these traditions. Perhaps we have been too tenacious in our adherence; perhaps we have regarded reading and writing and the other subjects that have long been taught in the schools as sacred and have been afraid to make a change. But one thing is sure: while teaching reading and writing, we have learned enough about human nature to be able to speak on the educational problem. We are therefore in a position to take the new suggestions and the new social situation and use the wisdom of our experience in the best possible form of co-operation and initiative. If we are ever going to show any initiative in working out any great reform in education, this is the time when we as teachers must deal with the problem of vocational education vigorously and with clear insight. We are not to draw back from the problem because it is large and grave. We certainly cannot allow those who are not acquainted with the difficulties of educating immature children to settle the questions which are now up. We should stand, I believe, prepared both to deal with the problem and to defend those virtues of the school for which we can produce an adequate justification. We should be untrue to our past as professional teachers if we did not realize that the problem is our problem and not to be taken from us by anyone else. We shall certainly be untrue to our past as teachers if we allow others to criticize our work in this field without presenting the grounds for our practice, and without seeing to it that that which had been good in the school system is preserved in any school system which is erected upon the foundation of the present school. There need be no criticism of the motives which are involved on both sides of this debate, but it is clear that we have come to the point in our professional life where it is our duty to insist that we are qualified to deal with the great educational problem which is upon our people. We cannot listen to those who tell us, as they have done in flippant words, that we are selling a "gold brick" to the people. I confess that I have no patience whatsoever with those educators who have gone to the meetings of practical men and have repeated this charge, and have said, "School people are not competent to deal with this matter." If there is

any ground whatsoever for that criticism, then it becomes our business to devote ourselves most energetically to a co-operative attack on this problem. I believe that the Department of Superintendence should undertake investigations, first, for the purpose of understanding clearly and definitely the demands which the practical world is making upon the schools, and next, for the purpose of devising some general program even if it is experimental. The trouble now is that there is no comprehensive, co-operative, national plan before us, no program such as some of the state commissions have prepared.

If it is necessary, let us have several committees appointed to go into the details of the matter, to examine and evaluate those experiments which are being tried in various parts of the country, and to see to it that the material is made accessible so that every teacher shall first realize the significance of the problem, and, second, have easily at his hand the material which will make it possible for him to have an educational judgment. It may be that this will involve the production of practical reading-matter; it may be that this will involve the production of textbooks. If we leave the preparation of this material to individual initiative, there is danger that it will not be prepared in a form in which it can be used thruout the general school system. There is danger that attention will not be drawn to it except thru the accidental advertising of the book trade. We ought to have our eyes so clearly open to this great professional demand that we can set committees and groups of individuals who are skilled at work under our professional auspices. The man or group of men who have a program for the solution of this problem will be heard, and it is because the practical people have set their minds upon advocating a definite general program to which they adhere that they have been heard so frequently. We certainly ought not to show less co-operation and initiative in this matter than the manufacturer's association.

These are some of the concrete lines along which it seems to me we ought to begin to consider the organization of our profession, and the initiation from the educational profession of large educational undertakings. We cannot do this work if we are so absorbed in our individual tasks and our individual problems that we do not see the necessity and importance of organized co-operation. There is no possibility of our showing that degree of initiative in educational activity which we ought to show unless we can get together and support each other in our endeavors. Sporadic initiative there is and some organization there certainly is within the teaching profession, but initiative ought to be cultivated in a very much higher degree and the organizations ought to be made definite and explicit. They ought to be prepared to cope rapidly and effectively with the problems that are before the modern world; they ought to be so strong and ought to have such power of presentation of their cases that the educational profession will no longer be dominated from without, no longer be dominated

by forces that are vastly less competent to deal with the educational problems than is the trained expert educator when he is banded with his fellows and strong in initiative to perform his professional task.

THE NEED TO DREAM

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In one of those wonderful articles written about the kindergarten by people whose critical fancy is untrammeled by actual knowledge of what a kindergarten really is, there is a story of three children seeing a stone in the road. One, having suffered from kindergarten training, says it is a bird or something (I forget just what). The second, also demoralized by the kindergarten, says it is a fairy. The third, not having undergone this perverting influence, says it is a stone, and is commended of the author for so saying.

Of course the thing didn't happen. I have read pretty nearly the whole of Froebel, and I think there is no mention of fairies in his writings. Children of the kindergarten age do not need fairies in their business, because, when it comes to making the world as they would have it, they can beat the fairies at their own game. And the anecdote is untrue in the more important sense of not being sound fiction. Froebel did not invent imagination in the child, he only discovered it. It was put there before his time. And finally, the power of imagination in children is not an evil to be eradicated, but on the contrary an essential means of life and growth. A child without it would have no hope of growing up. Indeed, he would be in every important sense already dead. It is to this last proposition, that imagination is an essential part of the process of the child's growth, that this paper is addressed.

The child, I take it we all agree, grows by what he does. He is sent into the world as unformed as he is in order that he may do so. That is the explanation of the whole phenomenon of infancy, of the fact that there is a child at all. What part has imagination in the child's activity and so in the direction of his growth?

Omitting the period of babyhood, and taking the next, or kindergarten stage—say from about three to six years old—I think we shall probably agree that imagination here takes the leading part in the child's development. This is pre-eminently, and very obviously, the age of the imagination; what I have ventured to call the dramatic age, the period when the thing imagined and the reality are hardly distinct, and the child very largely makes the world to suit himself.

If the child at this period of growth wants to be a horse, or a schooner, or a northwest wind, why he just is one. Why not? A plaything, any outward object, is useful chiefly as a peg to hang imagination on. The

block is a sofa, a cow, a railroad train, according to the requirements he makes. The favorite mount of a small friend of mine was a half barrel hoop, not I think because of its resemblance to the bucking bronco, but for some recondite reason that I could not penetrate, but which certainly did not imply a very literal resemblance. I remember the same child appeared with a bit of hose, and on my asking what that was, he said: "Why, can't you see? It's a skunk, it squirts." I could not see it, but the fact was obvious to him. Napoleon boasted that he had made marshals of France out of mud. The child of five does the same thing every day. Probably Napoleon himself began by making pies out of the same material. To the child of the dramatic age the world of reality and the world of imagination, the world of desire and the world of fulfillment, the world that proceeds out from his own heart and the world as he finds it, are one. For him, to imagine is to accomplish. Things are malleable to his desire and take the form he wills. Aspiration and achievement are still identical.

At about the age of six there comes a change. The block suddenly refuses to be a cow or a sofa or any other thing but just a block. It sets up a character of its own and has the audacity to stick to it whatever you may want. And so with the child himself and the varied characters he had assumed. Walking in a queer struck-by-lightning way ceases to make him a soldier, nor can he any longer become a horse, or a steam engine, or a big wind at pleasure. A characteristic of this age is disillusion. The ship we built upon the stairs has dissolved into its component parts, the doll is stuffed with sawdust, and the child, awakened from his dream, finds himself amid the ruins of his self-constructed world. As in the case of all converts, the new knowledge is sharply accented, not consistently perhaps, but at least a part of the time. The child now turns with especial animosity against all forms of make-believe. He won't hop like a toad; he don't want to be a mother bird; he scorns his little sister's games and refuses to take part in them, at least when the men of his own set are looking on. He says all that is silly, and even glories in his own sophistication about Santa Claus.

The god that has thus driven out the love of make-believe is a new and insatiable desire for the real, a hunger for hardpan. On the purely intellectual side, this, as Froebel points out, is the age when the boy wants to climb the tree to see what is the other side of the fence; to turn over every stone to find what is under it; the time when he returns from his walks with bugs and spiders and other distressful specimens in his pockets. It is the age of mischief, the period in which the child wants to turn on the water, light the matches, play with gunpowder, and with the hind leg of the horse. People think he does these things because they are so annoying. That of course increases the attraction, but it is largely a by-product, a happy godsend, like the beauty in the rose or the scent of the June fields. The main motive is that of finding out. This is the scientific age, the time of

wanting to come against the real in every form. He wants to touch and taste everything and get up and jounce on it, to test, and most feelingly experience, what it truly is. His mischief is largely for the sake of testing you, to find out if haply you are real. He is skeptical, unsympathetic, he must be shown. He tries different stimuli upon you to see how you will react. You say "don't" pretty often; he wants to find which time you really mean it, just as he sticks pins into his companions in order to determine by actual experiment where they really live.

As a result of this new awakening, with its appreciation of reality, its predilection for the hard, obdurate, unsympathetic fact that will not dance to your music or do your bidding in any way, the child's world has suddenly sprung apart. Imagination and reality are now as the two poles. He sees his desire and the actual as the extremes of contrast. No longer a magician, able to create enchantments with his rod, he is now only a small boy without even a man's powers to make the world over as he would have it. His capacity for achievement has shrunk from the power to make trees and ships and oceans do his bidding, to create horses and chariots out of sticks and stones, down to what he can himself actually put together with his own hands. His child's world has fallen to pieces—imagination on the one side, actuality on the other. He starts at the very bottom of the ladder in the life's work of reconstructing it.

But it is a mistake, the great mistake of all, to suppose that because the child of this age has lost the illusion of the plasticity of the outer world, his desire to mold it into the form his soul demands is lessened, or that imagination, his former means of its summary transfiguration, is dead in him. Nothing could be farther from the truth. It is true he no longer possesses the magician's wand; imagination is no longer the equivalent of reality. And it is also the case that, awakened to the contrast between his gorgeous fancies and his puny power of realization, and conscious of the ridicule a disclosure of his dreams may bring on him, he becomes intensely secretive. Of all wild creatures, the small boy is shyest and most difficult to tame. To most people he is utterly impenetrable. Many boys, perhaps the majority, are so to all grown-up people.

But it is still, even in the toughest, most anti-sentimental boy, in the inner world, the world of imagination, that the most important part of his life is carried on. The saddest and most fatal misunderstandings between children and their parents or teachers arise from the failure on the part of grown people to recognize the intensity of this inner life, or from supposing that the child's real thought is simple or easily visible to them. If that is your idea, you have not taken the first step in the understanding of the child of this or any other age. In every child at his most Philistine period the poetry and imagination are still there, tho the stream has suddenly sunk underground and left only the hard dry surface visible to a superficial observer.

And what does imagination mean in this Big Injun period of the child's development? What is its contribution to his growth? A study of one of its manifestations, I think, gives us the key to this question. In some instances, at least, the imagination of the Big Injun age retains the form of actual impersonation characteristic of the earlier period. Boys sometimes, I am told, even up to the sere and yellow leaf of the college age, will be knights and heroes in a very serious way in some small circle of their own. I know a lady who still stamps her foot and carries her head like a spirited charger, as a result of being the Chevalier Bayard up to the age of fifteen or thereabouts. And a schoolmaster has told me that when he was at boarding-school he always thought of himself, in all his lessons and games, as performing some heroic action of an imaginary sort. Such impersonation is, evidently, much restricted in its subject-matter. The child no longer takes on the character of natural objects nor of personalities that are fascinating merely because of their occupation or other outward attributes. The experience is now always of an ideal personality. How common such survival of the impersonating impulse is I am unable to say, nor does it matter for my present purpose. Such instances are important, not chiefly in themselves, but as showing the direction that imagination takes during this Philistine age, and indicating the vital importance of its satisfaction.

Impersonation of an ideal character is clearly an instance of projecting in the imagination an ideal of life and conduct. It is a means of reducing such an ideal to possession by taking the first step toward realizing it. Not contented with visualizing the heroic character, it insists upon the more realistic method of muscularizing it, getting not merely the look, but the feel of the personality assumed, bringing it home in the most intimate way, giving it body and carrying power for thought and feeling. Every soldier—everybody else, for that matter—knows the intimate relation between bodily carriage and morals. To stand right and move right, especially if such standing and moving proceeds outward from a deeply felt ideal, is in itself an important part of conduct and the beginning of much more. To adopt the voice and bodily carriage of the ideal Bayard or King Arthur or Galahad is to go some way toward possessing their spirit and moral attitude. It creates a habit of body and mind that is a barrier against evil, and must be radically changed if anything mean or cowardly is to be done.

There are dangers, of course, in such impersonation if persisted in too long. If there is neglect steadily to translate the ancient into the modern requirements, to recognize and respond to the demands of knighthood as they occur in daily life, the result may be disastrous. In this, as in other cases, adhesions may be formed binding the soul to early manifestations of an ideal which ought in the course of nature to be outgrown. There are plenty of Sentimental Tommies, whose heroism, like that of the great Tartarin, is of the imagination only. On the other hand, if you can get

King Arthur actually to enter your soul and fight for you in the schoolroom and on the playground, he is as valuable an ally as any boy need have.

For us the important thing about such instances of surviving impersonation, be they rare or common, is not their spiritual value in themselves, but the fact that they furnish a key to the imagination of the Philistine age and to the part it has in a child's growth. Whatever its form, the function of imagination is now and henceforward to make the first projection of the soul in action, the earliest presentment of the ideal. Imagination is action in the soft. It is achievement in its initial stage.

Imagination, however, at the age we are now considering, commonly takes a more abstract form than that of impersonation. The child, become acutely conscious of the real, builds his castles out of confessedly imaginary materials. His method is sometimes a day dream—long, long thoughts of what he is to do or be, of the princess he will rescue, the dragons he will slay, the better social order he will build. As the boy is father of the man, so is the day dream the special moment of his parenthood. It is the source to which, if all goes well with him, the stream will ultimately rise. The man is the incarnation of what the child has done, and the first form and instance of his child's doing is in his dream.

Children often tell stories to each other. They tell about when they were sailors in that strange grown-up past in which such wonderful things take place—the past golden age which is really a first rough sketch of future glories. Perhaps they describe what they did when they were little—some three inches high—and went to sea on toy boats; passed thru those harrowing but glorious experiences at boarding-school; how they met Fairy Cross-Sticks yesterday, or the Ghost with the Bare Nose, and of the conversation that ensued. Such narratives are continued at intervals, like a serial story, for months, sometimes for years. And a great part of the imaginative life is now in reading or in hearing books and stories. Vast and fascinating realms are opened out which the child recognizes and appropriates as his own and in which he wanders with delight.

These various methods of imagining are not so very different. From listening to the story of Robin Hood, to going out and *being* Robin Hood in the back lot, the change is largely one of form. If there is greater intensity in the more active method, there is greater freedom in the other. As you sit looking in the fire while your mother reads, you can always be Robin Hood yourself, or Sir Galahad, Tom Sawyer, Tom Brown, Rebecca—whether of Ivanhoe or of Sunnybrook Farm—Heidi, Sir Launcelot, Sir Lamarack, or Sir Bors de Ganis; while in the actual impersonation there may be difficulties: other children are so mean, they always want the best parts for themselves. But the experience in both cases is essentially the same. In all these heroes, whatever the method of their presentation, the child

recognizes himself, finds the first expansion of what he feels that he is meant to be. It is the experimental modeling of action in material furnished by the imagination, as a sculptor models his statue first in the clay before he cuts it in the stone.

The need which imagination thus fills in the child of the Philistine age is a need common to all children and to all men, the need to dream. It is the need of building castles in the air before trying one's architectural conceptions upon the tougher susceptibilities of brick and mortar. It is a part of the general human need to translate ideals into action, and this again is a constant and inevitable manifestation of the need to live. The business of life is the putting together again of the world which the disillusion of the Philistine age has torn apart. That is the aim of all human striving, the inclusive object which we all seek, and in the struggle for which true life consists—the reuniting of desire and actuality, the subjection of outer nature and of our own acts to our ideal. The successful man is he who can perform the miracle of Orpheus, make sticks and stones and trees and animals obey the inner music.

And thus, the one business of our life is not a simple process. An instinct, or the ideal that forms the heart and center of it, cannot be translated immediately into outward acts. From inspiration to execution is more than a single step. Between the first stirring of the god within us, hardly more than a pain, to the laying of one stone upon another in the growing edifice, there is a world of effort and endurance to be faced. It is in this interval that all the important questions are decided—the questions of life and death and of the degree of life to be attained. It is here that the moral drama is enacted, that the pain of daring, of waiting, the very throe of creation, is undergone. When the definite purpose has been formed, the fight is already lost and won.

In this process of translation from crude instinct to finished act, the first step is the seeing in a vision what it is that the soul demands. You cannot form a purpose, you cannot even make a plan, unless you first possess the ideal on which your plan is based. It is impossible to translate directly from a divine discontent to a finished poem or statue or political institution, or to the day's business in any form. The ideal must first grow and take on form and color in the mind. It must become alive, irradiated, possessed with brilliancy and momentum, before it has power to give its law to outward form or action or to any plan for such. You cannot draw up specifications from a mere uneasiness.

The more fully, upon the other hand, you are possessed of your ideal, the more truly it lives and acts in you, the more adequately will it be possible for you to sketch its outline and fit a plan to it. If the flame burns hotly in your heart, if the vision is full of life and color, you may, by good fortune, reduce some suggestion of it to the hard sharp lines prerequisite to practical achievement. Your plan may, in that case, have some touch of truth and

adequacy, contain some hint of the glory that lives in the heart of a creative instinct, and that was the divine source of your discontent. And it is only so that you can hope to give expression to the pushing life within.

The seeing of the vision is not an easy thing. To see at all is given only to those who will possess their souls in patience till the spirit comes. It was no false report of the world's artist race that represented the god as first appearing in a cloud. Translating the ideal into action is like drawing from memory. The thing first appears as a face in the mist, a vague leading here, an adumbration there. The process of reducing it to possession is like taming a wild creature. To go a step beyond the revelation is to lose the vision. It flees from sudden reduction to crude lines. You must watch by the spring, sometimes for months, lucky if you catch in its surface a moment's glimpse of Pegasus among the clouds. And when, by some happy insight, you have caught a glimpse of your ideal, the danger is that you may go away about your business and straightway forget what manner of man you were—what you truly had it in you to become. The spirit comes and goes as it will and must not be rashly interrogated. Specifications too soon demanded imply a fatal error. But if we wait and listen, the message will become alive, will take on power and brilliancy, and mold both us and outward things to serve it.

> I am one who, when
> Love inspires me takes note, and in the way
> That he doth sing within, I go and tell it.

It was a great moment in the history of art when Dante took note of love's inspiration, greater even than when he went and told. This is the idolatry that is also true religion, the setting-up of an ideal image in the heart.

It is true of dreaming in any form, as of impersonation, that it has its dangers. The dream, if it remains a dream, may be not a step in successful action, but a dereliction from it. The dream of the ideal and the planning of its concrete accomplishment should draw together. The great architect can dream in stone, feeling the limitations of his material, not separately, but in combination with his ideal. But still in all great art, in all creative action of every sort, the dream is there. The soul, as Emerson says, is open on one side to the infinite, and its first finite articulate voice is in the utterance of the imagination.

A man can, it is true, win great apparent success without much use of the imagination. He can be a successful devotee of the Goddess of Efficiency, whom we now so devoutly worship, but yet he will not be a successful man; his action, not proceeding truly from himself, will not belong to him nor be a fulfillment of his life. Action is, indeed, a kind of sleep, a forgetting of what you started out to do in the throe of doing it. There is an anesthesia of action, a self-hypnotization, a shutting-off of the intellectual faculties, as in the tiger about to spring; and as cultivated in a dog who has been

taught to "point." A study of the absence of this self-hypnotizing power of the practical man is seen in Hamlet, the man who still ponders when he ought to shut off the thinking faculty and get to work. The opposite vice has yet to find its Shakespeare—that of the practical man who, in the meeting of insistent claims for action, never wakes up, never remembers or stops to look once more toward the heights he started to attain. I will return to the hills whence is my strength. As action is sleep, so it is when he has his dream that the man is truly awake. It is in the moment of vision that he is alive to the larger issues, and sees himself and his aims as they truly are. First build your castle in the air. You will show yourself an able architect if you can catch one-half the beauty the god has whispered to you, even in that easily wrought material.

The procedure of reducing ideals to action is not unlike the mathematical device of assuming a solution of a problem as a means of solving it. Execution proceeds by steps. It is methodical and deals with one thing at a time. Inspiration is of the whole, a vision of the finished product. Its office is to govern both plan and execution. If the true end is not there at the beginning, the whole work will be cold and uninspired. True achievement begins not at the beginning but at the end.

It is true, practical sir, that our dream must be reduced to action, brought down to earth. That is a vital if obvious part of life's procedure. But the process must not begin there. First catch your dream. In order that it may be reduced to reality it must first exist. If you personally do not see visions or dream dreams, you would best pray for some dispensation, for some dyspepsia even, to cure you of so vital a defect.

Dreaming is an essential part of the technic of living. It is of the very grammar of action—the first rule in the book and one that every child should know. Picturing to himself a heroic life is a necessary step in the expression of the child's instinct to be somebody, to have a life of his own, to assert himself as an original and creative force. Imagination is the law of the oak becoming conscious, the invisible projection of the future tree. It is the first form of the striving to become, the forward throe of conscious purpose in the soul.

How can the need to dream be recognized in education? How can the power of seeing visions be cultivated?

The first thing is to recognize the place of the imagination as the leading organ of growth, and dreaming as one-half the process of living and of coming alive—to see in it the first reaching-out of the soul toward life, as training in efficiency is the reaching-down of practical means to meet the soul.

1. The practical measures necessary are, in a general way: First, that we should continue to allow ample room in the kindergarten for the training of the child's imagination, neither reducing education at this age to a training of the sense of touch, nor making it what is called practical.

When the child wants to make the block serve as a cow, a sofa, or a steam engine, we should not divert him into studying instead the difference between spruce and maple. He might possibly, during the three years of the imaginative age, learn as much on that topic as he would learn in ten minutes when the practical age has come; but in the meantime we should have sacrificed to the anticipating of that ten minutes the three years in which the life of the imagination should take possession of him.

2. Another practical means of developing imagination is music. It was said early in the last century that England had the rule of the sea, France that of the land, and Germany the kingdom of the air. That kingdom has now been reduced to reality, largely thru the power of music. When Father Jahn started the Turn Vereins, with their music and gymnastics, he started to build the Germany that now is. That was a dream. And what has come of it? Was it practical? Ask the English, or our own business men who meet the Germans in neutral markets at the present time. A friend of mine, who traveled with some other American teachers in Germany last summer, heard the great German choruses which turned out to welcome them in the different cities they visited, and he heard one German woman say, what thousands of her fellow-countrymen and women feel, that the Fatherland will never be conquered while Germans sing like that.

3. We should use symbols which stand as provisional representations of all that cannot be said. They are the bright figures seen at the end of the long vista of the imagined good, standing in the mind for what is still to be revealed.

4. And, finally, there are fairy stories, stories of heroic historic characters, and the myths and legends, which are better than history, because they are truer to the human soul. These are the real literature of childhood and are necessary to full and healthy growth. Dr. Johnson was in the right of it when he said in criticism of the nursery literature of his own time: "Babies don't want to be told about babies. They like to be told of giants and castles and of somewhat which can stretch and stimulate their little minds."

A child's reading should not be to any great extent books of useful information. It is true that, if the instruction is carried in a story that interests the child, as in the case of the "Rollo Books," they will feed the scientific side of the Big Injun nature. Such stories, however, will never be the most important and cannot in any way take the place of those of the imaginative class. Charles Lamb had the right of the matter, and his humorous exaggeration may have been justified by the useful-information stories of his own time, when he wrote:

> Mrs. Barbald's stuff has banished all the old classics of the nursery.....Knowledge insignificant and vapid as Mrs. Barbald's books convey, it seems, must come to the child in the shape of knowledge; and his empty noddle must be turned with conceit of his own powers, when he has learned that a horse is an animal and Billy is better than a horse,

and such like, instead of that beautiful interest in wild tales, which made the child a man, while all the time he suspected himself to be no bigger than a child. Science has succeeded to poetry and no less in the little walks of children than of men. Is there no possibility of arresting this force of evil? Think what you would have been now if instead of being fed with tales and old wives' fables in childhood you had been crammed with geography and natural history. Hang them! I mean the cursed Barbald crew, those blights and blasts of all that is human in man and child.

Literature is not only a stimulus to the child's own spontaneous imagining, but also a mold into which his life in the imagination may be run. There is this great difference between the imaginative life as carried on in listening to stories and as evolved purely out of one's own inner consciousness, namely, that myth and story present the ideal not merely of the individual but of the race. Literature is to mankind what impersonation is to the child. It is the dream of man, the gorgeous presentation, by the accumulated genius of the race, of what all the ages have been able to divine of human destiny; the accumulated prophecy of what the human soul demands. Literature is the vehicle in which the visions of all the poets, the dreams of all the prophets, are handed down. The biological importance of infancy, to which man owes so much, is due largely to the margin left in it for education, and to the imitative and social instincts which insure his seeking to be educated, and so attaining a social, and therefore cumulative inheritance. His mind and heart in this way become heirs to whatever all the generations of his race have learned. And it is in the form of literature that this precious inheritance, so far as it consists in knowledge of the soul of man, is passed along.

Suggestion is all-powerful in this realm of the development and transmission of ideals. Even in purely physical performances one sees the effect of precedent. A new record in the high jump raises the average performance a fraction of an inch. In morals much greater results are possible. Heroism, adventure, moral enterprise are largely traditional. Our conception of the possibilities of human daring is a social product. Heroes have progeny wherever their deeds are told. Myths and fairy stories, sketching in rainbow colors man's spiritual demands, with a royal disregard of physical limitations, serve the child as a rough draft of his future accomplishment. Imagination, led by these, illumines the patient grubbing work which finally wins results as wonderful as those obtained by Aladdin from his lamp.

Poetry is not merely something made. In its widest sense, of creative imagination, it is the process of all making—the first form of all the works of man. It is the original and decisive stage in every enterprise. A deed that is not an embodied poem is not an act, did not proceed from the man, but happened to him like a fall or a disease. And all literature, as distinguished from encyclopedias, railway guides, and other works of useful information, is poetry at heart. It is prophetic. Its function is to explore and stake out new extensions of the spirit. In childhood, with its vague but infinite outlook and small effectiveness, this bodying-forth of the ideal,

this drawing the thirst for life toward noble objects, is of vital consequence. It is as much an element in growth as air or food. No child has had a fair chance to grow who has not known the great myths and fairy stories and tales of heroes.

There should be in every school, and above all in every family, reading aloud, the storing of the memory with the music of great literature, sounds that speak directly to the soul and give carrying power to great ideas. Family life without good reading must be lame indeed. The children in such a case are disinherited of the most precious human birthright.

Your old men shall dream dreams and your young men shall see visions. William James said that mankind is divided into the tough-minded and the tender-minded. Perhaps it is the same division that is meant if we classify men as those who build in the air and those who build on the ground. Of course everybody who really builds does both, but there are two temperaments which accent respectively the aerial and the terrestrial method. Of the two processes, the building in the air is the more truly practical. Iron, coal, electricity were in the earth at the time of the cave men. What was lacking was the power to recognize and use them. It is the same today. The mountain is full of horses and chariots of fire round about us, if only we could truly see and use them. It is the vision that is lacking. And the same thing is true of human nature. Personality is like an iceberg—only about one-tenth appears above the surface, the rest represents the vast mine of spiritual resources lying ready for him who has the prophetic power to divine and call them forth. I once heard Booker Washington tell of one of his demonstrators showing his people how they could improve their farming. He said, "Any one of you can double the size of his farm whenever he sees fit. You can do it by simply ploughing twice as deep." That is the dimension that is generally forgotten. The spiritual resources of any one of us could be doubled in the same way tomorrow. And the power thru which it could be done is the power of imagination.

THE UNMEASURABLE IN TEACHING

NATHAN C. SCHAEFFER, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, HARRISBURG, PA.

A college president came to the breakfast table, looking haggard and out of sorts. To the wife's query as to what had disturbed his usual equipoise, he said he had had a dreadful nightmare, the effects of which he could not throw off. On being asked the nature of his dream, he replied that he dreamed that on the morrow he would have to pass the college-entrance examination to the Freshman class. If all the superintendents and other educators here assembled had to pass next Saturday the examinations which they set for teachers and others, what sleepless nights they would

pass during the remainder of this week! The answers which are given at examinations can be graded and measured with reasonable accuracy, but who can measure the worry, the mental anxiety, the waste of nervous energy which are caused by our system of examinations?

As a test of efficient teaching, the examination has its limitations because it cannot adequately measure intellectual capacity and mental efficiency. For instance, there is a kind of memory which resembles the porter of a hotel who is expected to deliver unchanged what is given to him at the railway station. The memory which gives back knowledge in the exact form in which it is received is likely to shine at examinations, but the types of memory which are exercised in the preparation of a speech cannot be tested by an examination—these belong to the unmeasurable in education.

Has not the time come when we should recognize that the examination is like the drug which has a twofold action, the primary action being stimulating, while the secondary effect is to depress and leave the victim weaker than before? Has not the time come when, instead of multiplying examinations and measuring the efficiency of our teaching by the averages which our pupils get at these monthly or semiannual tests, we should study the reflex action which examinations exert upon the methods of teaching, upon the habits of study, and upon the vocation or profession to which the examination is the door of entrance? This would bring us face to face with the deeper aspects of education and cause us to appreciate the unmeasurable in teaching.

But I must turn to other phases of my theme. In these days we hear much about vocational education. We measure the value of schooling in future earning power, and upon that basis frame our answer to the question: "Does education pay?" A letter from an aged educator in the Mississippi Valley complains that corn-growing and corn-clubs are all one hears discussed at educational gatherings. The increased yield per acre which results from agricultural education can be measured in bushels or dollars. But if agricultural education did not yield far higher results in the life of the pupil, it would not be worth the ado which is made over it. The insight into nature and its processes of growth, the habits of industry engendered in tilling an acre, the development of character and will-power, the preparation for useful citizenship—these are of far greater value than the bushels of corn which the increased yield per acre can give us. We should not despise or neglect the arts that make bread—this cannot be emphasized too strongly at teachers' meetings and in the classroom—but, on the other hand, we should not forget that the greatest teacher of all the ages is authority for the statement that man shall not live by bread alone. Our schools were established to promote the things of the mind and these belong to the unmeasurable in teaching.

When George Wolf became governor of Pennsylvania, he found 250,000 boys and girls growing up without the ability to read and write. To

banish this illiteracy, he staked his political future upon the establishment of a system of schools open to rich and poor alike. Today you can hardly find a native above the age of ten unable to read and write. If Pennsylvania had not been made the dumping-ground for the illiterate immigrants from southern and eastern Europe, she would compare favorably with the states west of the Mississippi River. If the public schools had not been so eminently successful in banishing illiteracy and ignorance, the magazines and other periodicals which delight to attack our teachers would not count their readers by tens and hundreds of thousands. The circulation of our newspapers is positive proof that the schools have been successful in achieving the original purpose for which they were established. The readers of a newspaper can be counted, but who can measure the influence for good or evil which a newspaper may exert simply because the schools have developed the reading habit among our people. The history of the state and the nation is taught in all our schools. The daily recitations and the answers at our examinations can be graded and measured. But who can measure the patriotism which our history teaching begets? The students of child life say that patriotism is the chief characteristic of the boys who attend our public schools. It matters not how perfect the recitations in history are, the teacher has failed if the pupils do not go forth from his classroom with the determination to live, and, if need be, to die for their country, yea, with the determination in the boys and also in the girls that when they attain the suffrage no ward boss shall ever buy their vote. In the teaching of history the things which can be measured sink into insignificance when compared with those that are unmeasurable.

For years the schools have been so successful that whenever anything goes wrong in the church, or the state, or the community, or the home, the reformer shies the problem at the school, and the little woman who gets forty or fifty dollars a month is expected to provide the remedy. When the good women of this country found legislation unable to solve the temperance problem, they turned to the school. Today we can count the decrease in the kegs of beer and bottles of whiskey sold from our breweries and distilleries, but the advance in health and happiness due to this teaching, no one has tried to quantify. And the day is not far distant when the school must make war upon the cigarette and show that the honors, the prizes, and the best positions in our colleges and universities, and in the industrial and commercial world are no longer within reach of the boy addicted to the use of stimulants and narcotics. The habits which are formed at school and which, when the will enters into them, become school virtues and belong to the unmeasurable in teaching are seldom if ever referred to by the critics, simply because they cannot be quantified by any standards of measurement.

Occasionally I find a high-school teacher who delights to poke fun at the religious faith of his pupils, or the pupils' parents. A worse service no

teacher can render. Destroy faith in things unseen and eternal and you have robbed the pupil of the strongest support in the midst of the trials and disappointments and sorrows of this life. When you stand at the open grave that is to swallow and close over the remains of a departed child, or friend, faith in heavenly recognition means more than all the bushels of corn which can be raised in the Mississippi Valley.

There is a higher life of thought and faith and hope and love which can be promoted or destroyed by the teacher and his teaching, a life which turns on the unmeasurable and the immeasurable in teachers and teaching, and which in the end must determine whether failure or success shall be written over the doors of our public schools.

The best and the worst result of our examinations cannot be gauged by any units of measurement. If the examination is unfair, the candidate will resort to unfair means in trying to pass, thus lowering the moral tone of the school. If the examination is righteous, and neither teacher nor pupil should object to a righteous test of their school work, it may uplift the moral tone of the school. Henry Clay said, "I would sooner be right than be president." If at the examination the candidate can say, "I would sooner fail than cheat; I would sooner carry a good conscience than a diploma or license," he begins to show the spirit which made Henry Clay a statesman rather than a politician.

I have sometimes been called the Pennsylvania Limited. I do not object to the nickname, because this famous train always reaches the terminal station on schedule time, and as we enter the terminal I leave with you a broad street outlook upon the unmeasurable things in education.

Teaching should without doubt enhance the earning power of the pupil, but too much mechanical measurement takes the joy out of the children and out of the teacher. The best part of teaching, that which arouses the will, awakens the feelings, stimulates the ambition, inspires the sense of something to be achieved, and gives purpose and ideals to the life, cannot be quantified but belongs to the unmeasurable in education.

TOPIC: SOME EXPERIMENTS IN SCHOOL SYSTEMS AND THEIR OUTCOME

A. DEVELOPING A SCHOOL SYSTEM

C. S. MEEK, SUPERINTENDENT OF SCHOOLS, BOISE, IDAHO

I have been requested to survey the process by which the newer school activities have been developed in the city of Boise, Idaho.

Four years ago, in organization, facilities, and equipment, the schools of Boise were not superior to those of most villages and towns in the United States. The school city at that time numbered about twenty thousand. Since that time it has had a normal but not unusual growth. The board

of education decided that the time had arrived for the beginning of a modern city system. A physical director for the high school, a playground director for the grades, and a school nurse were employed. To facilitate closer supervision of instruction a grammar-grade supervisor was employed and one for the primary grades. Manual training, cooking, and sewing were added to the elementary schools. To conduct this work, four special teachers were employed.

In the high school a four-years' commercial course was added, two years of shopwork, two of drafting, two of cooking, two of sewing, two of music, including history of music, theory and harmony, chorus, orchestra, and band, two of art, two of dramatic reading, and four years of agriculture. To conduct these newer school activities, twenty-two additional special teachers have in the past three years been employed and are this year being paid a total of $33,350.00. During this time the traditional courses in the high school have also been enlarged and made more varied.

Sixteen units of credit are required for graduation. These sixteen units may be selected from a curriculum which offers just fifty-three units. To distribute students properly into the various branches of so varied a curriculum requires a very liberal scheme of election. The problem to be solved was to see that every student should have liberty broad enough to fit his course to his own vocational needs and at the same time prevent him from spreading his energies over an unarticulated field that leads to nothing. The scheme selected to meet this situation is to require of all students three years of English. To prevent scattered effort with such a minimum of required work, each student must select one of the teachers as his adviser thruout his course. That adviser consults the parent or guardian, gets all the information possible, and selects the program in the light of the results of this investigation.

Such a scheme will work only when all the teachers are in hearty sympathy with the newer and broader aim of high-school work. Along this line we have had no difficulty. All the teachers are in hearty co-operation with the liberal policy of the system and are conscientious in carefully investigating the vocational aims of the separate groups of students for whom they are sponsors.

In all industrial lines of school activities, the most difficult problem is to give pupils the training that functions with real industrial life. Some examples will best illustrate how we attempt to meet this difficulty.

Our commercial department takes charge of the purchase, sale, and payment of all books and supplies sold to the students. We hope to turn over to the students in that department the purchase, distribution, and payment of all the supplies of the district, and to have them keep all the books of the district. Of course, teachers must carefully check all transactions. But no more time is required to check a real transaction than an artificial one. The boys in our shops do all the repairs on our buildings and

are given credit for summer work done under, and approved by, a competent contractor or builder. Any job of work done in the community by shop boys and approved by our superintendent will mean so many hours of credit in school. The boys in the drafting department have planned more than fifteen residences already built in the city. Their exhibits in machine and architectural drafting have taken prizes in competition with professional draftsmen at the state fair. The plans for our Washington School building are the product of students in this department. They are now drawing, tracing, and blue-printing plans for a greenhouse we are to build. These plans include the drawings for the heating and plumbing systems to be installed. They are also producing all the plans and specifications for our Lowell School to be built this year. This work must all be approved by our own superintendent of buildings, who has built many of the largest business buildings in the city. Thus, we shall soon have school buildings costing nearly $100,000.00 constructed without employing a professional architect. A number of our boys are employed by the United States government as draftsmen on the five-million-dollar irrigation dam now in process of construction in the mountains above our city. The professional work they do there will be accepted as credits toward graduation from our high school. One of the boys, who last year graduated from this department and is now associated with his father as a building contractor, came to the school the other day to get the plans and specifications for the Lowell School. He intends to submit to the board of education a bid for the construction of this building. If he gets the contract, there will be almost as much joy among the students as there was last Christmas Day when their football team, on their own field from which the sage brush had been but recently removed, defeated the champions of the sixteen Chicago high schools.

Most of the people of southern Idaho are interested in some specialized line of agriculture or horticulture. Agriculture and horticulture, therefore, occupy a more conspicuous place in our curriculum than any other line of industrial work. The four-years' course consists of basic agronomy, practical horticulture, animal husbandry, farm mechanics, and farm management. We have more than one hundred students in this department, most of whom are boys, tho the course is popular among girl students. Two teachers now devote their time exclusively to this department. An additional instructor will be employed next year. Regular classroom and laboratory instruction is supplemented by much practical field experience in as many as possible of the specialized lines of this industry. Students plant, prune, spray, and cultivate commercial orchards, and work for wages in commercial packing-houses. Arrangements have been made with implement houses whereby students may go into the field and demonstrate farm machinery to prospective purchasers. Boys working under expert superintendents in orchards or on ranches and in fruit packing-houses in the

summer will, upon favorable report from the superintendent, be given credit for such work. The managers of all the stock farms in the valley gladly bring their stock on to the school grounds and give lectures on stock-judging before the classes in animal husbandry. During the state fair, all of the judges accompany the classes to their special departments and demonstrate the points upon which the stock is standardized. Dairymen have gladly set apart whatever portion of their herd is required by the department for demonstrations in feeding, care, and milk production. The school has for three years owned a dozen pens of fine poultry, thru the care of which much interest has been aroused among both the boys and girls in the poultry industry. The students and teachers of the schools co-operated with local breeders in organizing the state poultry show, at which many of the prize exhibits were owned by students. A year ago the board of education leased the thirty acres of land inside the mile track of the state fair grounds for a demonstration farm. A practical farmer was employed to work under the instructors of the high school. Teams were procured, machinery purchased, and everything possible is now being done to make that tract of land the best example of intensive farming the Boise valley affords. The experts in the United States Reclamation Department give instructions in all problems of irrigation. The Agricultural Department of the state university, and the seed-dealers and seed-growers are all interested and render valuable assistance. Our program is to make this an outdoor laboratory for the agricultural department and also to make it self-sustaining by the sale of products. The program for future development includes the addition of a commercial greenhouse and model dairy.

Just as soon as an athletic director for the high school, and a playground director for the grades were employed, and organized recreation given a distinct place in the curriculum for all the schools, the need of a central athletic field and playground was felt. The co-operation of all the clubs, the chamber of commerce, the city council, and the juvenile court was procured and a campaign for parks and playgrounds was launched. Just as soon as enough carefully nourished public sentiment was aroused to make the transaction a safe one, the board of education paid, out of the school funds, $16,000.00 for forty acres of wooded land on the shore of the Boise River easily accessible for all the schools of the city. One thousand dollars have since been paid a landscape artist for plans for improvement which include baseball and football fields, tennis courts, children's playgrounds, an outdoor gymnasium, and an auditorium. Three thousand dollars have already been spent out of the school funds in developing the land according to the plans and specifications. The future development of this school park, as well as the supervision of the demonstration farm, will be placed in the hands of the teachers of agriculture in the high school, one of the two teachers having a Master's degree in forestry from Yale,

and two years of service in the United States Forestry Department. He will superintend the planting and care of trees and shrubs, the making of roads, swimming lake, wading pools, etc. In developing the park and cultivating the farm, all the labor possible will be done by students in the agricultural department during the school years. The teachers will be retained during the summer and all students who will work under their direction during summer vacation, eight hours a day for eight weeks, will be given one year of credit in agriculture, or for four weeks' work, one-half year of credit. We hope to enroll at least fifty students in this continuation school.

These examples are given to illustrate our attempts to make industrial education, as conducted by our public schools, valuable training for the vocations of real life. The remarkable growth of the high-school attendance is evidence that we are, in a measure, successful in our endeavor. Four years ago the total enrollment in the high school was 400. This year we shall enroll 900. Four years ago 44 were graduated, the largest class in the history of the school up to that date. This year we shall graduate 130. During the same period, the total enrollment of all the schools has increased 25 per cent. While the total enrollment has increased 25 per cent, the high school has increased 122 per cent, and the number graduating has trebled. More than one-fifth of the pupils enrolled in the entire system are now in the high school. No artificial methods have been adopted to retain pupils in school. That class of students which formerly dropped out of school before they entered upon or completed the high-school course is finding in the varied lines of the industrial courses now offered training that they and their parents recognize as valuable for their chosen vocations in life.

During the period in which industrial activities have been introduced and developed, the traditional lines of high-school work have not been neglected. A four-years' course in German and two years of French have been added. Two years of Spanish will next year be available to students who wish it. The teaching force in all lines has been strengthened. Library and laboratory facilities have been enlarged.

The number of students preparing for and entering college each year increases. The only drift away from the college-preparatory courses is from that class of students who formerly in a spiritless way served time, because the studies available afforded them no vitalizing motive. These and many more who formerly never entered the high school are now in the industrial departments working with enthusiasm, energy, and efficiency.

Public education as now conducted in Boise is much more expensive than formerly. On teachers' salaries alone the budget has increased a trifle over 64 per cent in four years, while the school enrollment has increased but 25 per cent. The regular maintenance expenses have increased in a

greater proportion than teachers' salaries, since equipment for industrial activities costs much more than that for general culture subjects. During the same period $300,000.00 has been expended for new buildings, and $25,000.00 for the purchase and improvement of grounds.

Boise has an active and virile taxpayers' league which has recently assailed every form of state, county, and city taxes, but not one public attack, thru the press or from the political platform, has been made against school taxes. A crusade against school taxes has been avoided by keeping the public constantly informed as to school expenditures. The patrons have been educated as well as the children. Every educator of note who has visited the city has appeared before the commercial club and has talked to the business men about the policy of the school authorities. The recently employed special teachers have time after time explained or demonstrated their work before mothers' clubs in the afternoon, and patrons' meetings in the evening.

Last spring an industrial exhibit was visited by more than four thousand patrons. A school festival was given in which twelve hundred costumed children demonstrated their school dances and games before seven thousand spectators. The business men of the city asked the public schools to give the feature parade of the Irrigation Festival which occurred in Boise last fall. Thirty large floats, all equipped for brilliant electrical display, were designed by the art department of the high school, traced and blue-printed by the drafting department, built on the school grounds by the students in manual training, equipped for electric lighting by the physics classes, and then distributed to the various buildings for decoration. The costumes for eighteen hundred children who participated in the parade were designed and made under supervision of the sewing teachers in the high school and grades. This parade was escorted by four troops of United States cavalry and three bands. The citizens' committee paid the expenses but not one dollar was charged for labor. The memory of that service which the teachers rendered the community is yet so vivid that complaint of school taxes would not strike a popular chord.

The school authorities have realized that their enlargements were expensive and not along conventional lines. Care has therefore been taken to procure expert advice on administration policies and educational results. Three years ago, Commissioner Kendall, of New Jersey, at that time superintendent at Indianapolis, visited the schools and made a report to the board of education. Last month, Dr. Judd, of the University of Chicago, Dr. Elliott, of the University of Wisconsin, and Dr. Strayer, of Teachers College, Columbia, visited the schools for one week and made a report. Both reports have been printed and distributed among the patrons of the schools and the taxpayers. These reports have been of great value to the school administration in the community, and have satisfied the taxpayers that their money has been judiciously expended.

The people will stand increased expenditures and will co-operate in enlarging the school facilities, provided the results of that increased outlay are commensurate with the sacrifice.

B. SCHOOL CREDIT FOR HOME INDUSTRIAL WORK

L. R. ALDERMAN, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, SALEM, ORE.

When I arrived at the town of about two thousand people where I had been engaged to teach, the chairman of the school board accompanied me to the schoolhouse, on the Friday before my new school was to open. Among the other bits of advice he gave me was that one particular boy should be expelled, upon the first provocation. The boy had given trouble the year before, and should not be allowed to contaminate the whole school. He had stolen things and had been in a street fight. For two years running he had been expelled at the beginning of school. The boy's father and mother were good people, but they had no control over the boy. This was not very encouraging to me, as I had not had such an experience before, in fact had never taught in a town so large. I was looking for the boy the next Monday morning. He was pointed out to me as he came down the long walk to the schoolhouse. Instinctively I studied him, as he came up the steps, measuring him with my eye as if to get an estimate of his physical strength, as well as of his mental make-up. He was large for his age, carried his head low, and looked up from under the brim of his hat. He looked at me as if to say, "I do not like you, nor any who are in your sissy business." He chose a seat in the back corner of the room, signed his name in a big scrawly hand, and gave his age as seventeen. It seemed to be generally understood that he would make some trouble, so as to be expelled the first day.

During my vacation, I had read *Jean Mitchell's School*, and I remembered Jean Mitchell had scrubbed her schoolroom. I had noticed on the Friday before that the schoolroom had not been scrubbed, nor the windows cleaned, so I said after the morning recess, "How many of you would be willing to help scrub out the schoolroom this afternoon? As this is to be our home for the year, we want it clean." All seemed willing to help, and this boy threw up his head, and took a good look at me as if he thought I had some little glimmer of intelligence. The pupils were to bring brooms, mops, and pails from home. Harry brought a broom and mop, and a package of gold dust, almost full, which he had stolen from his mother. He scrubbed harder than any other boy in the school. He seemed to be a leader when it came to doing things with his hands. I was much delighted to see in him a willingness to help. I found out that he was totally lost when it came to studying grammar and fractions. These were not in his line, and unless the school took into account some active work it could not

reach Harry. We had no manual training in the school, but we had football, baseball, and gardening. In all of these he excelled. I became convinced that in order to reach a boy like Harry, the school would have to broaden out, and give credit for his activities.

Next year in high school there was a girl who had a great deal of time to run the streets. I would see her going to the post-office and to the train every day. She hardly ever had her lessons. I clearly saw I was not reaching her. She was a large, healthy, good-looking, happy-go-lucky girl. Going home one night from school with one of the teachers, I was told that Mary's mother was coming down the street. As I felt she and I had a big job on our hands, I wanted to meet her. So I crossed the street, and came face to face with her. I saw in the face of the faded little woman signs of one of life's tragedies that we see so often, in overworked disappointed mothers. Her daughter had broken away from home influences. I realized that Mary was as cruel as the Spartan boy she and I had read about in history, who had been taught to slap his mother in the face that he might be hardened for battle. This was her first year in high school. I realized that the nebular hypothesis and quadratic equations could not reach the real Mary, nor the real Harry, who was also in this school. That evening I thought it all over, planning how I could come to the aid of Mary's mother. The next morning before the algebra class I said, "How many of you girls swept a floor or made a bed before coming to school?" Some hands, not Mary's. "How many of you helped get breakfast this morning?" Some hands, not Mary's. "How many helped get supper last night?" Some hands, not Mary's. "None of you need to be told that the best friend you have or ever will have, perhaps, is your mother. Let us see what we can do to show our appreciation of our parents." I was struck with the real interest the class showed. "Tomorrow," I said, "I am going to give you ten problems. Five will be in the book, and the other five will be out of the book. The five out of the book will be: (1) help get supper tonight; (2) help do the supper dishes; (3) help get breakfast; (4) sweep a floor; (5) make a bed." I also gave certain duties to the boys. I said, "These tasks are going to count the same as algebra problems." The next morning I was delighted to see the eagerness with which they responded; they had worked the five problems in the book and the five problems out of the book. Mary continued holding up her hand after I had asked how many had worked all the problems. I said, "Mary, what is the matter with your hand?" She said she had worked five problems in advance in the book. I had never associated the working of problems in advance with Mary.

The tasks were changed during the year. We had at different times credit given for home work, the same as for school work. During a discussion at an institute meeting, a very good principal asked me, "If we give credit in algebra for home duties, what will become of the algebra?" I

never have been able to answer his question. Once I was arguing with the residents of a small district that I wished would consolidate with another district. A man rose and said he believed in consolidation in general, but this particular district had the graveyard deeded to it. If this district's identity was lost in consolidation, what would become of the graveyard?

At the next county election, the Republican party was short of material, and I was elected county superintendent. My belief in encouraging home work had become a working conviction by this time, and I am sure I bored some very good teachers nearly to the point of death talking about it. I was asked, "Why should school credit be given for work not done in school? Let school credit be given for school work, and home credit for home work. It is dishonest to give credit at school for things done at home. The more we can keep home out of the school, the better it is." Some good staid teachers looked at me as if I had broken the Ten Commandments, and I had some qualms of conscience, and wondered if I could not bring myself to a condition of being satisfied with seeing school credit given only for work done in school, of being content if the subjects in the books were taught, and of not caring if the children did spend their time on the streets.

On my visits to the country schools at first I made speeches upon the importance of education, how it would pay the pupils to be well prepared before taking up the duties of life. I prided myself upon my ability to make this seem wonderfully ponderous to them. But I noticed that nothing happened. They looked dazed and glanced often at the clock to see if it were not nearly time for school to close. But when I asked them to do something, to make bird-houses for their back yards, or for the school yard, they were all alert, and I had over nine hundred bird-houses built by the children of our county that year. I received many letters from the children telling of their work. One little letter has always stayed with me:

MR. ALDERMAN, DEAR FRIEND:

I am in the third grade. I like to go to school. My mother and I built a bird-house. Two bluebirds live in it. I am going to marry a lawyer. Goodbye.

I always wondered why she wanted to marry a lawyer, and live in town, when she was living in the most beautiful country in the world.

One day as I was visiting a country school, I saw a boy taking up a collection in his hat. I was told they were taking this up to buy popcorn, as one of the boys was going to town Saturday. I asked why they did not grow their own popcorn. I knew it would grow there, for I was born and raised in that part of the country. I told them I would give five dollars to the boy or girl who could raise the best popcorn that year. This seemed to interest them. I asked how many had raised watermelons. I was told nobody did, for the boys in the neighborhood were so bad about stealing them. I asked, "If everybody were raising watermelons who would there be to steal them?" All you have to do to get a grin the full width of a

child's face is to mention watermelons. Going home that night in my buggy some ten miles, I concluded we would have a school fair and give prizes for watermelons and muskmelons. When talking it over with my wife that night, we added vegetables, jellies, bread, canned fruit, and sewing to the list for which prizes should be given at the fair. A trip down one side of the business street, and up another, and I had all the prizes I needed to advertise the fair in the fall. It was not long before a father brought his boy to the office to learn more about the contest. The father patted the boy on his head, and said, "John has a garden. He has pumpkins as big as a bushel basket." How John's eyes sparkled at the praise of his father. They went out and got into the wagon, and I could imagine the conversation John and his father had on the way home. It seemed worth while for us to go into home work and give some credit for it. The fair was a great success, and it has grown with every year. This last year, its seventh, there were four thousand exhibits. The crowd is the largest that ever gathers at the county seat.

The first year of the fair I heard high-school girls say as they looked at the long rows of bread, "I am going to learn to make bread." As they looked at the rows of ruby and amber jellies, "I am going to learn to make jelly." I had mothers call me in as I drove past their homes, to show me the sewing of their daughters. We had a larger attendance at our parents' meetings after the fair was started. It became evident that we must co-operate along the line of the activities of the child, if we wished to secure the co-operation of the parents. They could not co-operate along the line of decimal fractions, infinitives, and participles. People I had not known were interested in education at all would comment upon the interest the children in the neighborhood were taking in things. In order to raise better products they had to read bulletins. It created a real interest upon which the teachers could build in educational progress.

I was next elected city superintendent of a city of about ten thousand people, and found the children were just as eager for activity as they were in the smaller towns and in the country. We had school gardens for the seventh and eighth grades, and did the work during school time, on the condition that the children would keep up their school work. This they did for the sake of working in the gardens. Certain teachers were willing to take into account home activities in the school. We had sewing taught. We had a bread day. Hundreds of people came to see the loaves of bread the children were able to make under the guidance of their mothers. We had bird-house day. Nearly five hundred bird-houses, some of them wonderfully made, were exhibited by children who had learned from their fathers how to handle a hammer, and how to saw off the end of a board. I have heard teachers say that it is too bad the schools do not have accommodations for industrial work, but every girl lives in a place where there is a stove and cooking utensils. Every country or small-town boy lives

where there is a saw, a hammer, and an ax. If every school will furnish the child with a desire to make something, he will surprise you with his ability to make it. If you can create a desire in a girl to make an apron, or a dress, or a skirt, she will find someone to show her how to make it. I have noticed that the girls in some of our larger schools in the domestic science class were perfectly happy making loaves of bread, tucking the little loaves into shining new pans, and putting them into the gas oven. They would watch eagerly when they were taken out, delighted with the beautiful, well-shaped loaves of a perfect brown. I have seen the same girls look with scorn at the big cookstove oven at home, and the large unpolished tins. I have seen the mothers make the bread, and cook the meals, as the girls of the domestic science class were too busy with their school work, which was supposed to mean so much to their future, to apply any of the results learned. I knew a teacher in a manual-training class who spent six months teaching the boys how to use a chisel, a plane, and boring bits. The superintendent had to have the truant officer compel these boys to attend the manual-training class. They wanted to make something. Children do not like to play at life, they want to live life. I have seen girls shrink from making little models in sewing, and the boys look as if they were afraid to say out loud what they were thinking while they were learning to use tools, just to use them. I have seen the bored looks upon the faces of pupils who were engaged in writing essays to be passed in to the teacher, and sent to the wastebasket. I have seen the animated looks on the pupils' faces when they were learning to write letters which were to go to some real place, and would bring back a reply.

And I have seen the enthusiasm of pupils in school where the school credit for home work was made an important feature. Where there were three such schools in Oregon in the spring of 1912, there are hundreds this year. Some give credit for home work as for studies, and use the home work marks in averaging up the total standings. Others make a contest of it, giving holidays or other rewards. Credits can be given for any home tasks, such as building fires in the morning, milking a cow, cleaning out the barn, splitting and carrying in wood, gathering eggs, wiping dishes, tending flowers, sweeping floors, getting to bed by nine o'clock, brushing one's teeth, feeding chickens, caring for pigs, cows, horses, etc. A certain number of minutes is allowed for each task. Parents are asked to sign statements verifying the amount of time spent in such duties. It is a rule in one of the schools that any pupil who has earned six hundred minutes may, at the discretion of the teacher, have a holiday. Samples of home work are often brought to school and placed on exhibition. The parents encourage this by coming to the schoolhouse when these exhibits are made, and the children by seeing the work of others learn to imitate the best.

I think the best compliment I have ever received, and one that I did

not fully appreciate at the time, was given when a man brought his boy to school and asked me to watch him, and see what *we* could make of him. Unconsciously almost I would watch him in class and out of class, and found it was but a short time before I had much to talk about with the father. I meet him occasionally now, and we have a common interest in the activities of the son. I have seen teachers ask for the co-operation of the parents, have seen the parents visit the schools, and try to look interested. I have seen them yawn, and when they rose to go, have heard them say they had been much interested and would call again, but they never came again, for it is impossible for parents and teachers to co-operate upon subject-matter in books, or methods of instruction, or to any great extent in courses of reading. But every parent is willing to co-operate to the limit along the line of the activities and the real interests of the child. I knew a teacher who, when asked what she taught, answered, "Boys and girls," and she meant the whole boy and the whole girl, the activities out of school as well as the activities in school. I know another teacher, the whole content of whose answer was that she taught arithmetic, reading, writing, and spelling.

A friend brought his boy to me and asked me to help him plan his high-school course, as he had just completed the eighth grade. I asked him if he had talked the matter over with his eighth-grade teacher. I had occasion to meet the teacher not long after, and asked him to tell me something about the boy, and for suggestions about the course he should choose. He told me the boy had never given him any trouble; he had got 93 in arithmetic, and 86 in grammar. But this did not throw any light on the subject of the boy's bent, or what course of study he should take up in high school.

It seems to me it is worth while to find some common ground upon which the parent and teacher can co-operate. It seems to me this common ground is along the line of habit-building by means of the activities of the child. What really counts in school or out is what habits are being established. Facts, formulae, and rules will be forgotten. But the habits which are formed are woven into the character. The child that does not have a habit of industry established by the time he is sixteen or eighteen is very apt to become a parasite. There are many children who go thru our schools, who, being naturally bright, do not find it necessary to become industrious. They get their lessons thru hearing the other pupils, or from the questions asked, or by a few glimpses at the book. In life they are going to need bodily industry as well as mental industry. The habit of being industrious will be of untold value to them. One great trouble is that we are likely to look at the matter from the point of view of the school, as tho the school were the end in itself. The school is simply the helper of the home, and only when the two work together can our dreams come true.

C. THE HOME-SCHOOL—AN EXPERIMENT IN HOUSEHOLD EDUCATION

RANDALL J. CONDON, SUPERINTENDENT OF SCHOOLS, CINCINNATI, OHIO

The "Home-School" was organized at Providence in December, 1911, as the result of a deep conviction that it is the business of public education to train girls more directly for the household occupations; that, since the home is of more importance than the shop or factory, it is even more necessary to educate girls for motherhood and the home pursuits than to educate them for the industries and the professions. It was also organized as the result of a second conviction, almost as strong as the first, viz.: that the courses in sewing, and cooking, "domestic science and art," "household arts," "home economics," by whatever name called, are not affording the education and training needed in this direction. Nor did I believe that the expensive "model flats" being installed in the newer school buildings would solve the problem, since at best they are only a make-believe—too formal, too expensive, and too remote from the real conditions of home to constitute a vital motive and to afford the necessary connection between the school and the home. And more than that I knew that a large proportion of the girls most needing this instruction were leaving school to enter upon pursuits that left little time and inclination for learning the simple household occupations in unattractive home surroundings. To turn the thoughts of some of these away from the department store and the factory, toward the work of the household as a more desirable vocation; to give vision, and to bring poetry and beauty into what would otherwise be only the drudgery of daily life; "to capture the soul that must one day express itself in the relations of wife and mother"—this was the purpose and the ideal of the Home-School.

That the purpose might be more certain of realization, and that the ideal might have a fitting embodiment, it was decided to organize the school, not in a schoolhouse, but in a home-house, like those in which the girls lived, differing from their homes not in kind but in quality; and, most important of all, to place in charge of this home, not teachers with schoolroom traditions who would be likely to teach about household occupations, but rather women of strong home instincts, who had had experience as homemakers and housekeepers, and who by their companionship and by their own refined personality might inspire in their pupils a love of home life and an appreciation of its duties and responsibilities; for these things can hardly be taught—they must be caught, and the conditions just indicated are most favorable for the contagion.

But the Home-School itself is not so much an experiment as it is an outcome; the result of twelve years of effort in trying to find means for more intimately connecting the instruction of the schools with the work

of the home and the community. In closing my annual report as superintendent at Everett, Mass., in 1900, I said, in looking forward to the new century:

But the greatest gain of all—and the one most necessary—will come thru the establishment of more vital relations between the pupil and the various subjects of instruction. He will be brought into closer touch with the world in which he lives; the school will be not so much an institution by itself, but will stand more as an interpretation of life and of the institutions of which the pupil is a part; it will not so much fit him for a life he is to live in later years as it will teach him how to live, and to interpret the life he now has. It will find or make opportunity for the expression of the things taught in terms of actual living, not at a subsequent period, but during the years of instruction. In the past, household duties have been taught most effectively and thoroly by giving children an opportunity to participate in the household work—by instructing them in this work, not teaching them about it. The apprenticeship system, was the recognized preparation thru which a young man was introduced to a profitable occupation. *He learned his work by working at it.* Modern social forms and industrial organizations have largely eliminated from the present courses of study these two vital subjects of instruction, homemaking and wage-earning, for they were as really a part of each young person's education as tho they had been taught in the schoolroom, and more so, because taught in reality and not formally.

We must and shall find out how to supply these omissions from our present system of education. We must teach our young women how to make homes, and our young men how to support them, and this solution must be the problem of future education.

To this end there must be established a closer relation between school instruction and the industrial pursuits.

Three years later at Helena, Mont., in an attempt to embody these ideas in concrete form, I prepared, with the assistance of several teachers, and issued for the girls in the seventh and eighth grades, a course entitled "The Girl in the Home." That outline tried to answer the question: What does a girl need to know in relation to herself, in relation to her family, in relation to her friends? There was little that was distinctly new in this outline; its main difference consisted not in what it contained but in the way in which it was to be used. The girl was to become the center of the teaching; she was to be taught to think of herself in relation to her home and society. Her instruction was to react directly upon herself, and was to be expressed in terms of work and of conduct. These sentences quoted from the outline of 1903 will indicate this directness of purpose:

If the subject is to be taught in such a way that there shall result from it more vital living, it should be made real. To this end there must be established a closer union of home and school. They are not to be considered as separate, but as parts of one plan of instruction.

Not only is what is taught in the schools to find its application in the home and society, but much of the teaching will be done thru the home and society.

Necessarily some of the instruction will be given by the teacher, but this instruction and discussion must be closely connected with the doing of the things taught; it must consist in actually performing the work, not as school exercises, but for a real purpose.

Visits should be made to dry-goods and millinery stores, for the purpose of examining materials, learning the cost and the amount needed for different articles of clothing.

Visits to furniture stores, markets, and grocery stores to examine and price the various articles under discussion.

When the convenience, decoration, and arrangement of a girl's room is under discussion, spend the afternoon at the homes of some of the girls who are willing to show how rooms may be simply and tastefully arranged. Many mothers will be willing to place their homes at the disposal of the class for an afternoon for purposes of demonstration and work in the kitchen, laundry, or dining-room.

It was a serious attempt to teach in school the things which must be applied in the home, and to have them applied there; and while every attempt was made to unite the two, the teaching and its application, it was only partially successful, for the schoolroom does not readily lend itself to such teaching.

The real opportunity to make the connection came some eight years later, when the Evening School Committee of Providence, R.I., authorized the superintendent to rent a suitable tenement or tenement house, to properly equip the same, and to organize a school for teaching girls household occupations.

The school was to be opened primarily for girls who had left school and were at work. They were to make up the evening classes, meeting from 7:30 to 9:30 o'clock. The equipment was also to be used from 4:00 to 6:00 o'clock in the afternoon, for pupils attending the day schools, and for those not in school, who might be at liberty to attend at that hour.

A canvass of the city for a suitable house and for the most promising location resulted in the selection of a two-family house, which had formerly been a well-to-do New England home. It was located in one of the poorer and more thickly settled sections of the city, from which the older families were moving away before the flood tide of immigration. The entire house could be rented for $35.00 a month, half of it for $20.00. It was decided that the lower floor would be sufficient for the initial movement and that there would be a positive advantage in having a real family living upstairs; for the school was to be established under conditions similar to those in the homes from which the girls would come, and few of them occupied an entire house. The location, type of house, and its surroundings were all that could be desired—a real "house by the side of the road," a little apart from, and a little better than, the homes of most of the girls in the neighborhood, but only sufficiently so to afford a better ideal toward which they might strive, and by striving reach, not something apart from their lives, but so near to their environment and condition that it would afford a vital incentive for making their own homes like the ideal.

There were five rooms and a bath on the lower floor, and two sleeping-rooms on the third floor. The front and back halls, the yard, and basement laundry were to be used in common with the upstairs family. The interior of the house was painted or stained in a cheap imitation of cherry; the designs of the paper were cheap and ugly; the floors were of soft wood, unpainted; the kitchen and pantry were particularly unattractive; the whole interior was dingy and somewhat depressing.

This was the house and its setting. Now for the renovation and furnishing! That the value to be derived from the solution of such a problem might not be lost, it was placed in the hands of the Senior girls in the home economics department of the Technical High School.

The landlady agreed to repaint the interior and to furnish paper which was not to cost more than eighteen cents per roll. There were to be no evidences of a school in the character of the furnishings; it was to be a real home, but such a home as might be possible for an industrious, intelligent working-man, with a wife who, by economy and good judgment, will make both ends meet; where much is made of a little, and where good taste, simplicity, order, and appropriateness take the place of expensive cheapness. The opportunity afforded a most interesting problem in real home economics. The girls were allowed two months for the solution of the problem; they studied color and design applied to paper, paint, floor stain, furniture, rugs, dishes, in fact, to every article of household furnishings needed in such a home. Harmony and beauty must be the result, but these must be secured within limited expenditures. There must be no article the purchase of which would not be possible and desirable in the families of the neighborhood. The study was well done and when the house was ready for occupancy it was a model of taste and simple refinement—a real home—lacking only a family. Then invitations were sent to the young women and girls of the neighborhood asking them to come and make it their home. And when they came they found over the doorbell a neat silver plate, bearing the inscription, "Home-School"; for I had decided that this should be the name—a school, with the emphasis upon the home; a house-craft school in which the teaching was to be given thru living experiences, under conditions that were as near those of the actual home as they could possibly be made.

Many things were purposely left for the girls themselves to complete. During the first months, in needle-work, they were occupied in making articles for the kitchen, dining-room, bed- and bathrooms; they hung the dainty curtains which had been stenciled and made for them by the Technical girls; they arranged the furniture and dishes; and, in general, set the house in order. The girls were to have the entire responsibility and to do all the work connected with the school except caring for the furnace fire. They were to wash, iron, clean, sweep, and dust; sew, mend, and make over; they were to cook, serve, and eat; build and tend the kitchen fire, and sift the ashes.

In the spring they were to plant the flower and vegetable garden in the back yard; tend it in the summer; cook the fresh vegetables; and pickle and preserve the surplus for the next winter's use. And there were to be long walks into the country for the girls who were free from work—to gather the wild flowers, and the wild grapes, apples, and barberries for preserving and jelly-making. It was to be work, but work that was joyous, and a large

part of the joy in the doing was to come from the well-doing. The talks by the teachers and the note-taking were to be so closely related to what was being done that they would constitute an essential part of the work. Intelligence, skill, power, joy were the results; learning thru study and work closely related. I had said to the teachers, "Don't think of yourselves as teachers, but rather as old-fashioned mothers bringing up a large family of girls"; and that this was their attitude is evidenced by one girl who said, "I love to be brought up this way, and I am going to bring up all my children just like this." The teaching led to self-activity and produced an inner unity, under wise direction; it was life, and the product was life.

A few details as to the organization of the work:

At first, three teachers were appointed, a fourth being added later. From a large number of applications 150 girls were accepted, and a long waiting list was established. They were divided into groups of thirty, each group attending two evenings, or two afternoons a week. The work was divided into cooking, sewing, and general housework—a teacher in charge of each department. The thirty girls in attendance at any one session were divided into groups of ten, each group in charge of a teacher, by whom they were again subdivided into smaller groups for more definite parts of the work. The group having sewing for one lesson would have cooking for the next, and general housework and hygiene for the third, returning to sewing at the fourth lesson. They were being trained to industry and thrift in the management of a well-ordered household; they were developing sympathy and helpful co-operation in working together. Responsibility was assumed; initiative was encouraged; the homemaking instincts were finding an opportunity for creative activity; ideals of cleanliness and order were being established. Thru this division into small groups there was no time wasted, no standing about, no looking on; everyone was busy, each with a definite piece of household work to be performed, and all were happy in doing something useful. The work of each division was well related and contained progressive difficulties.

The cost and value of food and all other materials were carefully studied; personal hygiene and household sanitation were given due attention; feeding, bathing, clothing, and care of younger children and babies occupied an important place on the program. And there were quiet hours for reading and meditation and serious conversation on the deep things of life; for these girls were being made ready for motherhood, and the spiritual ideals of home life were considered fully as important as the training in household occupations.

On Saturdays the mothers of the neighborhood brought their babies, to receive advice and instruction from the superintendent of child hygiene and a school nurse.

I must omit any discussion of the specific vocational training for waitresses and domestic service which are possible in a school of this

nature, in addition to its larger function of educating girls for homes of their own.

Before closing, however, I wish to point out one other direction in which such a school may fill a large and important place in a community, viz.: as a neighborhood center in which the home life of the people may be magnified.

The settlement house has shown the need and has pointed the way. The Home-School, maintained at public expense, belonging to the people themselves, will render a still larger social service, more general in its application and more permanent in its results.

What the regular schoolhouse with its assembly hall, gymnasium, and classrooms may become as a civic, recreation, and educational center, that the Home-School may become as a genuine, social home center from which shall radiate that spirit of friendship and those kindly influences that will reach the homes of the community and help to transform the residents of the city into the old-fashioned neighbors of the country.

The Home-School in the poorer neighborhoods will stand as a living example of what a home should be—an ideal of home life in which economy, thrift, good order, and beauty are so taught that they will be lived into all phases of home and community life.

But the school will do this only as it holds resolutely to its own ideal of a home that is not beyond the comprehension or ability of the girls to realize in their own homes—a school in which they may learn thru living experience what a home should be. If such an ideal is maintained, then many who come within its influence will feel as one girl did, who said, "This place looks more beautiful to me every time I come to it"; and some will go out from it to do as another did, who gathered a group of girls in her own home to teach them the things which she had learned at the Home-School.

Then across the lintels and upon the doorposts of many a humble home of limited means, where self-denial and strict economy must be practiced, but where peace and contentment abide, may be written these words, as a tribute to the Home-School mother of the household: "Give her of the fruit of her hands, and let her own works praise her in the gates."

One ship drives east and another west
With the selfsame winds that blow;
'Tis the set of the sails and not the gales
That sends them the way they go.

Like the winds of the sea are the ways of fate
As we voyage along thru life;
'Tis the set of the soul that decides its goal
And not the calm or the strife.

It is our business thru the school to help give the right set to the soul; the Home-School will, I believe, better than any other educational agency, give the set toward the home, and will enable the soul to find in it the goal of its highest expression.

D. THE CINCINNATI CONTINUATION SCHOOLS

EDWARD D. ROBERTS, ASSISTANT SUPERINTENDENT OF SCHOOLS, CINCINNATI, OHIO

The continuation school work in Cincinnati is of two kinds—voluntary and compulsory. The voluntary work includes a school for machinists' or printers' apprentices, and classes for self-formed groups of mothers and unemployed women to receive instruction in cookery and dietetics, in dressmaking, in millinery, or in homemaking, which includes house furnishing and decoration, sanitation, nursing, and, in general, the essentials of a well-ordered home and the qualifications of a homemaker.

The school for apprentices is a development from work privately maintained by various firms. This work was taken over by the board of education and a public school opened for apprentices in machine-shop, pattern, and drafting trades in September, 1909. Two years later classes were formed also for apprentices in the eleven trades classed as the allied printing trades.

The board of education provides the building, the teachers, the equipment, and the books and material. The boys, who range in age from sixteen to twenty-one years, attend one four-hour session each week. This school attendance is paid for by the employer at the regular shop rate, and absence or tardiness leads to the boy's being docked. During the present school year there have been enrolled 205 machinists and 24 printers' apprentices. The school is in session thruout the year, the instructors alternating in taking vacations.

The course of study for apprentices is academic and cultural entirely, there being no machines in the school. The school work is kept closely related to the shopwork by the systematic visiting done by the instructors, who spend two half-days each week in the shops, where the boys are at work. The course for machinist apprentices is four years in length. That for printers is just now in process of completion and will probably be a two-years' course.

The teachers in this school are both expert craftsmen and expert teachers. With these qualifications they retain the respect of the boys, to whom they become a very real inspiration, and command the approval and support of the labor organizations and the employers. Their work is supplemented by the voluntary service of owners, superintendents, and foremen of the shops, and representatives of labor organizations, who give instruction from time to time and assist in keeping the school and the shop in close connection.

The home economics classes are composed of mothers and other adult women, who cannot well attend evening school, but who desire instruction similar to that now being given to girls in the high schools. These classes are usually organized in connection with mothers' clubs in the schools, and must consist of at least thirty members. They meet in a two-hour session

once a week and pursue a course in cookery and dietetics, in millinery, in dressmaking, or in homemaking, under expert teachers. These teachers are either regular domestic science instructors in the schools or professional trade-workers. Twelve hundred women are now enrolled in forty different classes, meeting in thirty-six different school buildings.

The compulsory continuation school is the outgrowth of an interesting combination of circumstances. First, Cincinnati shared with other cities the feeling of regret and responsibility that each year so many children leave school to go to work as soon as the law allows, that is, when just fourteen, and upon completing the fifth grade. Practically three-fourths of the children have been going to work at fourteen, and over one-fourth after having completed only the fifth grade. There is reason to believe that, in a large number of cases, "having completed the fifth grade" is not much more than a phrase without significance.

Second, the marked value of the work done in the Cincinnati school for apprentices, described above, especially in giving the students a right attitude toward work and life, and in stimulating and guiding their energies in wholesome channels, led to the desire to do something of the same kind for these children between fourteen and sixteen.

Third, the Women Teachers' Association of Cincinnati had given serious consideration to the problem of the girls who leave school to go to work. During the Christmas holidays in 1909, this organization devoted a meeting to the discussion of how to reach girls, whom necessity forced to leave school in order to go to work. At that meeting a committee was appointed to consider the whole matter, to make an investigation of conditions, and to suggest methods by which conditions might be bettered. This committee was called the continuation school committee. At least a half-dozen meetings were held by this committee during the year 1910, at which were considered as many phases of the problem as it was possible to study by reading, inquiry, and actual observation. The committee became convinced that there should be established a school to which the young women at work could come, for at least one half-day a week, and so recommended to the superintendent of schools.

As a result of these different things, Superintendent Dyer and the board of education began, in the spring of 1910, a movement to secure legislation upon the subject. In May, 1910, largely as the result of the work of Mr. Dyer and his board, the legislature passed the following law:

> In case the board of education of any school district establishes part-time day schools for the instruction of youth over fourteen years of age who are engaged in regular employment, such board of education is authorized to require all youth who have not satisfactorily completed the eighth grade of the elementary schools to continue their schooling until they are sixteen years of age; provided, however, that such youth, if they have been granted age and schooling certificates and are regularly employed, shall be required to attend school not to exceed eight hours a week between the hours of 8:00 A.M. and 5:00 P.M. during the school term. [Section 7767, revised statutes of Ohio].

In January, 1911, the board of education adopted a resolution to establish part-time day schools in accordance with the law, these schools to be opened the following September, from which time attendance would be compulsory for those subject to the provisions of the law. Employers were so notified and preparations begun by the school authorities for organizing the work.

In February, 1911, a very strong elementary teacher, Miss Mary M. Conway, who was recommended for this place by the committee of the Women Teachers' Association, already mentioned, was appointed supervisor of continuation schools. Her first work was to visit all the department stores, in order to explain the work and to secure the co-operation of the employers. The response of the business men was unanimously sympathetic, and it was decided to open immediately a school for salesmanship.

In May, 1911, this school was opened, under the direction of the supervisor, and in immediate charge of a second very fine elementary teacher, who had previously been granted a three months' leave of absence in order to attend the school of salesmanship of the Women's Educational and Industrial Union of Boston. Twenty-five firms sent their employees, usually young women over sixteen, one half-day a week without loss of pay, in order to receive instruction in English, civics, the art of salesmanship, store arithmetic and accounting, textiles and fabrics, objectively illustrated, applied art and decoration, personal hygiene, life-ideals, and home economics. The school enrolled over two hundred students—firms sending between two and twenty girls—and continued for three months, until the exigencies of the store vacation period made it necessary to close the school. When, during the following month, the compulsory work was organized, the demand on the public schools was too great to permit the continuing of this special school of salesmanship. One firm, which had sent a large number of salesgirls to the school, was so well pleased with the result, that it arranged with the superintendent of schools to have the exclusive services of this teacher for some months.

The opening of the compulsory schools for children at work, between fourteen and sixteen, who had not completed the eighth grade, in the fall of 1911, meant the enrollment in school of more than 1,100 children at the very outset. The teaching staff consisted of the supervisor and three teachers (two women and one man) who were to devote their full time to this work. These were supplemented by regular elementary principals and teachers. Classes were formed in the various sections of the city, so as to be as convenient as possible for employers and children.

By means of the records in the work certificate office, a complete list was secured of all children subject to compulsory attendance, arranged by places of employment. Such lists were sent to employers, with the request that they inform the child where and when they desired him to attend school. Pupils registered in any convenient elementary-school building, during the

first week of the school year. At the end of that week, lists of classes, by grades, and by schools to be attended, were ready for teachers. Instruction began the following week and continued until the first of June. The classes were resumed last fall, at the opening of the regular school term.

The Cincinnati authorities have thus far insisted on only the minimum requirement permitted by the law—four hours a week of school attendance. Great freedom has been permitted in the choice of these hours, so that a child may attend school four hours continuously any day of the week, or one hour each of four days, or two hours on two days. In one downtown school building, classes are held every week day from 8:00 A.M. to 5:00 P.M., in eight buildings four afternoons from 4:00 to 5:00 P.M., and in six buildings on Saturday afternoons from 1:00 to 5:00 P.M. The various periods enroll the following:

All day school	684	25.5 per cent
Four to five classes	429	16 per cent
Saturday afternoon classes	1,573	58.5 per cent
Total enrollment	2,686	

After three months it was found desirable to combine the Saturday afternoon classes in downtown schools into one large school in the Woodward High School building. This new and elaborately equipped plant offered facilities for a differentiation of work and for the use of all the special equipment. It has proved to be the most attractive school of all for the children and enrolls 728 pupils.

There have been enrolled during the present school year 2,686 pupils, of whom approximately 300 are double registrations, leaving 2,300 children attending these classes. As this is about the number of work certificates issued during the year, we may believe that practically every child subject to the provisions of the law is in school. The public schools furnish a little over half of these children and the parochial schools the remainder. All are at least fourteen, for the law prohibits, with penalty, the issuing of a certificate to one who does not prove his age. Presumably, too, all these children have completed the fifth grade. It is found, in actual experience, however, that a great many coming from private schools have had a rather inadequate preparation, and are not able to carry sixth-grade work.

It is necessary, therefore, to classify the pupils into preparatory, sixth, seventh, and eighth grades. The percentage in each of these classes is as follows: preparatory, 12 per cent; sixth, 24 per cent; seventh, 31 per cent; eighth, 33 per cent. Promotions are made by means of readjustments during the year or in June. Of the 1,891 children remaining in June, 1912, 457 were given certificates certifying that they had completed the eighth grade, and were excused from further attendance. Nevertheless, more than one-third of these pupils returned to school the following September, attending voluntarily, in order to receive the advantages of the schools.

Where the numbers justify, the sexes are separated in order to permit a differentiation in work. Classes vary from twenty-six to thirty-five, but in the all-day school may be as small as twelve at certain hours.

By means of the work certificate office, the continuation schools are notified at once of all pupils who belong to their classes. In decreasing measure is it necessary to summon the aid of the truant officer in order to have the child report for enrollment, and not once this year has it been necessary to do what was done last year in about twenty cases; namely, revoke the work certificate and compel the child to return to the regular day school. The attitude of the children at first was one of dogged opposition to the whole scheme. If boys and girls ever went unwillingly to school, certainly the continuation school pupils did during the first year of the work. Now, all is different, and with surprisingly few exceptions the children come gladly and enter into the work heartily. Children who have become sixteen are continuously asking permission to stay on, which, of course, is always gladly given.

The reason for the attitude of opposition was in part the very thing that had sent some children to work; namely, a desire to escape school. The ordinary routine of school duties had become distasteful. This feeling was taken into account in working out the course of study for the continuation classes. The beaten path is left wherever possible, and when it is followed, it is, as far as can be, lighted up with new light. The work was, in the beginning, based upon the regular elementary course, which, however, was modified more and more largely as time went on. The teachers in charge of the classes, who were all superior teachers in the regular service, were called into weekly conferences, in order to work out the course in detail.

English and arithmetic form the backbone of the course, which includes also civics and hygiene, geography, physics, handicraft, art, and salesmanship. Daily drills are given in spelling, correct English, and rapid calculation. English includes reading, spelling, and correct usage, the aim being to connect these subject with the daily life and work of the child. The work is made intensely practical, so that the spelling-lessons will be words suggested by the child's occupation of the day. It is hoped, however, that the reading period will afford an opportunity to bring into the child's life a bit of the ideal, the cultural, that otherwise he might lack.

Arithmetic includes much practice in the fundamental operations as well as work in fractions, percentage, business forms, pay-rolls, the keeping of accounts, and simple bookkeeping.

Civics and hygiene, including moral instruction and personal guidance, is given more serious consideration than any other part of the work. It not only has its place on the week's program, but is also brought in incidentally whenever possible.

Geography has been taken largely from the commercial point of view, and has been closely related to present-day conditions in the child's own

city and country. Much use is made of the stereopticon in connection with the geography work, as well as in the study of civics.

Physics has been given at Woodward on Saturday afternoon, with a desire to broaden the child's outlook upon life thru his interest and intelligence. The work consists of simple experiments, which illustrate some of the more common experiences of everyday life. Thus far the experiments have dealt chiefly with pneumatics and electricity; in the future, the principles of steam engines will be studied.

The handicraft or industrial work has been given one-third of the pupil's time, and in the case of the eighth-grade boys and girls, it may occupy the full four hours. The boys who would thus spend their full time in the shop, taking a special line of work, have in a number of cases, completed the eighth grade and are attending voluntarily. The girls who devote their whole time to industrial work are those who are preparing themselves for tradework in millinery or dressmaking.

For boys the shopwork includes work in wood and in iron. Practically the entire shop equipment at Woodward is in regular use, and in three other buildings classes use the manual-training shop. There are classes in cabinet work, woodturning, forging, and electrical work.

Children who work in one line of industry are grouped as far as possible and given special instruction relating to that industry. However, the work is not always immediately related to the child's regular occupation, partly from a desire to counteract the effects of purely automatic work, and partly in order to give the child an insight into other lines of industry than those with which he is familiar.

The girls spend half-time in either sewing or cooking, as they may elect. The work is very practical in character. In sewing, the girls are taught garment-making by machine as soon as they have mastered the simplest principles of sewing. In cooking, emphasis is placed upon practical work and correct methods, the combination of suitable dishes for simple meals being the teacher's aim.

Novelty-making is taught in some classes, the pupils being given instructions in sample mounting, making of novelties, covering and lining of boxes and cases, accurate measurements, and the solution of problems pertaining to the economical use of materials. In certain cases, trade orders are solicited by the teacher and the articles are made in class, with a view to emphasizing the trade side or money value of time, skill, and material. The lessons in color and design in the art department correlate with the work of the novelty trade teacher.

The art course is planned to give to each boy who takes it the development and skill which will gain him promotion in his field of work. Thus, the boy engaged in jewelry-making is given problems in the designing of jewelry, while one employed in process engraving is given work in line and wash rendering. Mechanical drawing is taught to those who need

it in their line of work. A study of simple lettering is made, as well as the principles of proportion and of good and poor arrangements in signs and advertisements.

Those boys who elect the art course are given their entire four hours' instruction by the art teacher. He conducts the work in spelling and composition and arithmetic, as well as the discussion of current topics and of problems which arise in the routine of the boy's daily work. An effort is made to get into as close touch with the boy as possible, and to correlate the teaching with his work as a wage-earner. A decided lack of initiative has been noted in most cases, and, as a corrective the work is presented in such a manner as to stimulate self-confidence and intellectual curiosity, and to awaken the desire for originality.

Girls in the sewing and millinery classes are permitted to take one period of drawing per week, the work correlating with that of the sewing and millinery teachers. In the special classes, beauty in common things and art in the home and in dress are made most conspicuous in the course. Occasional visits are made to the leading stores of the city, where beautiful and attractive things may be seen and discussed. The firms have, without exception, shown a great interest in this feature of the work, and have displayed a cheerful willingness to offer every advantage for study. Trips of this kind have a double value, for they not only acquaint the children with the best phases of art products in the city, but also develop in them a spirit of freedom in visiting establishments of the better kind. Such excursions, with the accompanying discussion, have had a marked effect upon the members of the class. Good taste and discriminating judgment have been noticeably developed.

Instruction in salesmanship is given to all children from the retail stores. This work is in charge of the experienced teacher already referred to as the one who studied at the Boston school, where she served an apprenticeship in the city's leading retail establishments. The course consists of practical lessons in business arithmetic, including sales-slip practice, cash accounts, etc.; textiles, including cotton, flax, silk, wool, from raw material to finished products; color and design, including color combinations as to counter, dress, etc.; and salesmanship, including care of stock, approach, analysis of sale, closing sale, courtesy, demonstration sale. This work has received the strongest expressions of appreciation from merchants, who value it highly as a means of increasing the efficiency of the salesperson.

Thus far the story of what is. We in Cincinnati feel that two years' effort in continuation school work has only served to show us the problem and to point us the direction of its solution. Of the great need of more systematic and more intensive and more diversified work for these needy children, we all feel convinced. That it even now satisfies a great need for most of these children, they themselves continually give testimony.

The work has meant for many of them the taking-up again of a thread lost somewhere in the course of educational progress thru the regular elementary school. It spells new hope for the discouraged.

It has borne direct result in a more considerate spirit toward fellow-workmen, until there has come to be a real community spirit which is helpful to all. A very decided cultural uplift is seen in the rapidly improving manner of address to their fellows, in the less general use of slang and the factory vernacular, and in the frequent expression of little courtesies to their teachers and classmates. The growth in cleanliness and in a desire for saner methods of dress and living is decided. There is a growing interest in good books, as is proved by constant requests for information regarding them. There is, in general, an awakening to the interesting things about the child in everyday life, as is shown by the interest of the child in what he sees and hears and by his desire to make his information of service. In many cases there have been confidential conferences, which have given the teachers rare opportunities for personal counsel and guidance toward the highest ideals. The school has placed in these lives a new ideal, working thru a greater respect for authority, a more willing obedience, an increased responsibility, which will end, for many, in a desire to be of fullest service to themselves and their fellows:

The employer's attitude is typified in these words of Mr. Fred A. Geier, president of the Cincinnati Milling Machine Company:

> It is my opinion that the continuation school on the whole has proven a success, with every possibility of increasing usefulness as the school adapts itself more perfectly to the needs of the students and the manufacturers show an increased interest. A school of this sort cannot meet with the greatest success unless there is perfect co-operation on the part of industrial plants.
>
> The necessity for continuation schools need not be argued. Thoughtful students of our industrial situation realize that competition, as well as other causes, will call for a more intensive and more intelligent system of manufacture in the future. Improved buildings and improved equipment will not alone meet the situation. An increasing industrial intelligence will be demanded.
>
> The continuation school, thru its courses, can do much to stimulate the mental activities of the student and lead them in the way of a desire for increased knowledge, which is so essential to increased efficiency. In short, a better human element will be required in our plants, if we are to meet the more intensive competition and at the same time successfully meet the new demands that will come thru social legislation as expressed in shorter hours, compulsory compensation, etc.

A vision we have of the future of this work shows it housed in a splendid structure of its own, adequately equipped with every necessity for complete physical, mental, and moral training, with all the facilities of a modern club and the spirit of the finest home. Here the youth will come gladly to receive, at the hands of the competent, large-souled experts, the equipment which will make for the culture and the service of self and of the community.

THE MECHANICAL MIND

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This subject, "The Mechanical Mind," is seemingly a contradiction in terms, for when the mind becomes mechanical it is departing radically from its essential nature as a living organism. It depends wholly upon the manner in which we treat the mind whether it is to retain its vital character or become a mere machine. It may prove to be an organ most elastic and adaptable in its functioning, or, on the contrary, its activities may become so definitely set as to operate efficiently in only one determined and confined way.

It is the end of education to develop the mind as a living spirit, and not allow it to deteriorate into the operations of a machine, however perfect the machine may be. It is the function of a machine to turn out a certain product according to an exact program. The machine may be remarkably adapted to a particular series of operations, but it has no power of expressing itself beyond the restricted routine designed for it. It accomplishes its especial task supremely well, but is helpless in the face of emergency. What the machine does is something which has been thought out by others and wrought into its mechanism. It has no power of initiative; it is wholly the instrument of some other mind. It has no life within itself; some spirit outside of it must give it energy and driving power.

Now the mind is so constituted that it very easily learns to follow a mechanically prescribed form of procedure, and action thus determined soon becomes automatic. And so far as our actions become more and more automatic, the control of them becomes less and less conscious. Consequently the habitual set of activities which form the daily routine can be altogether directed by the lower nerve centers, so that the control of even the skilled hand in the most delicate and complex manipulation can be cared for wholly by the nerve centers of the spinal cord.

We become machines when the activities of life are thus no longer ruled by the higher brain centers. The very fact that the lower centers can care for the ordinary routine movements of the human body makes it possible for us to disconnect the great central office of the brain, and reduce our life to a merely mechanical order of existence.

There are many human beings who from birth are doomed to the fate of animal machines because of their deficient or impaired brain power, or the untoward circumstances of their breeding. But while this is true, it does not follow that we should so design our methods of education as to cultivate this tendency among the children of our public schools. It is, on the contrary, a most solemn obligation resting upon those who are responsible for the methods of public-school training to devise other means of giving a chance to all for whom a machine-like existence is not altogether inevitable.

The period of education is peculiarly a time for the awakening of the slumbering mind, and stimulating the brain cells into vigorous activity, causing the brain itself to expand with its expanding powers. It is the function of the teacher to call forth the spirit of life within the child. Whatever lessons may be taught, the great central purpose of teaching must not be forgotten, or ignored, or regarded as secondary; namely, the solicitous care and training of the powers of reason. The brain, the eye, the hand must be nicely co-ordinated; but let no one deceive himself with the prevalent modern fallacy, that the eye and hand can be trained, while the central factor of the combination, the brain itself, can be left out of account altogether.

I do not want to criticize the value of manual training or of vocational study; they are all very well in their place, provided the task which is taught is not disassociated from the directive, compelling, and creative power of the mind. Do not, however, allow the child to narrow down to the special activities of the trade until the mind has had a chance to find itself and assume permanent control of the operations of eye and of hand. It is true that the process of education can be most conveniently carried on, and can most plausibly justify itself by neglecting the fostering care of the mind, or at least relegating it to a secondary place, and endeavoring rather to emphasize the value of certain particular pursuits, which can be learned by imitation, and the slavish following of the thought of others.

It is easier to be superficial than to be thoro and to plow deeply into the lower levels of our powers. It is easier to act than to think; and it is easier to be taught to do some one definite thing than it is to exercise the God-given faculties of reason, and aspire to learn and do many things. It is easier to run human nature into a narrow mechanical groove than to develop the concealed possibilities of mental power and achievement. It is easier to follow a system which gives immediate returns than to prepare the mind for the possibility of results, which it will take years perhaps to mature. The immediate result may be most gratifying, but we overlook, or at least we do not care to see, the immediate limitations also which are naturally attached to such immediate results, and which make a continued progress of the mind forever impossible.

Where education leaves a mind that is awake and vigorous with life, it is possible to face the future with courage and with hope. On the other hand, where the young boy has been trained into a machine, and the mind thereby detached and dulled, he is doomed to the round of an unvarying grind, while the future holds for him no possibilities beyond the inevitably determined limits of his machine-like existence. For the youth of today, the only door of opportunity is the opening mind. The world acknowledges but one supremacy; it is the supremacy of mind; and but one aristocracy; it is the aristocracy of mind.

Let us, therefore, place before us as the supreme end of education,

the development of a versatile and resourceful mind. Let us train the child so that he must be dependent upon his reason, and not independent of it. Let us not prepare him for the slavery of routine, but endeavor to make him a free man in the kingdom of the mind. Let us fit him for a vocation, but let it be the vocation, not of a machine, but of a man.

THE HEART OF THE EDUCATIONAL PROBLEM

MARY C. C. BRADFORD, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, DENVER, COLO.

America's public-school system is on trial. The educational attitude is changing, and courses of study are being modified in harmony with the newer ideals. Whether these changes in aims and methods of study are meeting modern requirements cannot be answered, unless the chief purpose of public-school instruction is defined.

To the present writer, civilization is revealed in human institutions, of the highest ideal, the best self of any given citizenship, at any given time.

Civilization of this type is largely the creation of government, which last is nothing less than the science and art of living together in organized communities so that righteousness may prevail. The public school is the child of the government. Therefore, the public school exists for the making of citizens.

Education, then, should present a content and method conducive to character-building—to the formation of such a character-type in its people as will make it possible for the United States to fulfill its mission.

And what is the mission of the United States? What is the significance of the part it is destined to play in the story of the nations?

If it means anything of special import to be an American, it is because America is the realizing of a dream of human brotherhood; the coming to fruition of a rich and multiform opportunity; the conditioning of life in such a way that the ultimate possibilities of each human being may be developed. America stands for the social transformation, where happiness is demonstrated to be the child of freedom, and full satisfaction the result of the work well done.

If this be the import of the world-message that America is translating into world-activities, then to be a representative American citizen is to be adequate to all the demands of life—physical, mental, moral; and American education should provide such intellectual material and use such pedagogical means as will train the future citizen to see, think, work, love, and enjoy.

How many there are, who, having eyes, see not; who think they think, but rarely, if ever, partake of the supreme experience of vital thinking. How many labor, but never know the joy of transmuting labor into work. The sense of beauty and the sense of duty are alike necessary to the sense

of enjoyment, but too often the code of duty and capacity for the expression of beauty lie quite undeveloped as the result of the crowding of material demands. And as for that love which is conscious unity—if our representative American citizen who can see, think, work, and enjoy is to be speedily produced by educational methods, a new sociology must be adopted, its principals based upon this conscious unity and taught by means of love to all those whose characters are to be formed by the pedagogy of the American public schools.

Our ideal American citizen must have a trained body by athletic exercise, and by the exercise that comes from a certain portion of school time being devoted to labor with the hands. The body should be trained, not only for strength and skill, but for beauty and enjoyment, in order that life may be met with power and purpose, with poise and the æsthetic satisfaction that results from accomplishment.

Of course, a trained mind has always been the aim of school men everywhere, and so this requisite of the new education is but a repetition of the demand of the older pedagogy. But modernity, while emphasizing mental training, goes far afield for the means by which to produce intellectual development, and disciplinary value is acknowledged to be a part of many of the industrial and economic forces.

In fact, education is seen to be the conditioning of life by the education, not alone of the study, but by the education of the home and philanthropy, by community service, by professional preparation and trade skill. To this end, vocational training should be added to scholastic discipline, and, in short, all means employed for the training of the mind that are found to be capable of increasing its power of dealing with fundamentals, and making of it an instrument whose temper and reach will be adequate to deal with all subjects that may come within its scope.

But the training of the body has not always been recognized as a necessary part of a complete education. At present, the whole human being receives attention, and body and mind alike are developing with unprecedented vigor and in harmonious relationship.

The real heart of the educational problem today—that problem being the production of adequate human beings—is to secure the instant and efficient response of trained minds and trained bodies to the call of duty—to the voice of the higher self, of—I care not what you name it, tho I prefer to distinguish the something within, as the voice of the Most High, speaking directly to each human soul and radiating the glory of his nature in the secret recesses of human consciousness.

This is the meaning of all the upheaval and storm and stress that are shaking educational standards, destroying educational fetiches, and annihilating superstitions. It is but the effort so to adjust relations that life and books, the tools of artisan and artist, the work of producer and distributer may be enabled to function in scientific and æsthetic harmony in

the building of a new civic temple, the stones of which shall be living and glowing with the light of truth perceived, work well done, beauty revealed; all thru complete obedience to the law of service.

For this the public schools exist; and when they shall fully measure up to the standard of their great destiny, the American nation will have made its glorious dream come true.

TOPIC: REPORTS OF COMMITTEES ON EDUCATION

I

A. REPORT OF THE COMMITTEE OF THE NATIONAL EDUCATION ASSOCIATION ON UNIFORM NOMENCLATURE IN ENGLISH GRAMMAR

C. R. ROUNDS, WEST DIVISION HIGH SCHOOL, MILWAUKEE, WIS., CHAIRMAN

In February, 1911, at the meeting of the Department of Superintendence of the National Education Association at Mobile, the following resolution was adopted:

> The Department of Superintendence recognizes that the present lack of uniformity in nomenclature found in texts in English grammar is confusing and unnecessary. It therefore authorizes the president of this department to appoint a committee of five to formulate and report at the next annual meeting of this department a system of nomenclature for texts in English grammar, and recommends that publishers of such texts use this system if adopted by the department.

President Davidson, of the Department of Superintendence, appointed the following committee: C. R. Rounds, Chairman, Mrs. Ella Flagg Young, Stratton D. Brooks, A. F. Lange, and Henry F. West. Mr. West, then assistant superintendent at Baltimore, was obliged to resign from the committee, on going out of educational work, and in his stead Professor W. G. Hale, of the University of Chicago, was appointed by Dr. Davidson.

Back of this action of the Department of Superintendence in creating this committee was a long period of agitation. The chairman of the committee had long felt the need for uniformity in English grammar texts and had, for more than two years, been calling the attention of other teachers to the matter. In 1910, he had conducted a considerable correspondence with school men regarding the possibility of taking some definite measures to secure uniformity, and about two hundred school men, including normal presidents, state superintendents, city superintendents, and, what was really most significant of all, teachers of grammar, had indorsed a plan similar to that contemplated in the resolution quoted above. Indorsements came also from several state and sectional associations. The commission of these five people, therefore, was in accord with the expressed wish of a large and representative group of school people.

But in its inception thus far, the work of the committee was limited in its scope to English grammar. Simultaneous with this movement, and indeed, preceding it, had been three others with similar ends in view. In

England, a committee representing many educational associations had been at work, and in 1909 it had presented a preliminary report, the final report in 1911 covering the grammar of German, French, Latin, and Greek, as well as that of English. Similarly, a report for French grammar had been presented in France, its final form being published under the auspices of the government, represented by the minister of education. It may be added here that German and Austrian committees are now engaged in the same work, and that their reports will cover English, German, French, Italian, Spanish, Latin, and Greek.

On this side of the Atlantic, before the agitation for uniformity in English texts had taken place, teachers of foreign languages, both ancient and modern, had felt the great loss that takes place when a student enters upon the study of a new language, thru the difference in terms given to identical constructions. They had also deplored the difference in terminology in different texts in the same language. Foremost among those interested in this situation must be mentioned Professor W. G. Hale, who had presented the matter to the American Philological Association and the Modern Language Association in 1909 and 1910 respectively. John C. Kirtland had also dealt with the subject in the *Classical Weekly* as early as 1909.

It will be seen, therefore, that while the movement for uniformity of terminology in English texts was taking place in the National Education Association, there was, in the two great representative associations of teachers interested also in languages other than English, a movement of wider scope, contemplating the possibility of at least a degree of uniformity for the grammars of all languages studied in our public schools. The first definite step toward the union of these two aims came at a meeting of the Michigan Schoolmaster's Club in April, 1911. A day was devoted to the discussion of uniform grammatical terminology, and at the close of the symposium, a resolution was adopted commending to the three following associations, viz., the American Philological Association, the Modern Language Association, and the National Education Association, the formation of a joint committee of fifteen, consisting of five from each body, "to work out a system of grammatical nomenclature applicable to the ancient and modern languages most commonly studied, with a view to harmonizing, so far as possible, existing differences in nomenclature." In July, 1911, at the San Francisco meeting of the National Education Association, on motion of Mrs. Young, this plan was adopted, and later, President Carroll G. Pearse reappointed the committee appointed by Dr. Davidson. The Modern Language Association appointed the following: F. G. Hubbard, English, University of Wisconsin; E. G. Hills, Romance languages, Colorado College; W. B. Snow, head of the Department of Modern Languages, English High School, Boston; Edward Spanhoofd, German, St. Paul's School, Concord, N.H.; and E. H. Wilkins, Romance languages, Harvard University (now of the University of Chicago). The

American Philological Association appointed the following: B. L. Bowen, Romance languages, Ohio State University; Hermann Collitz, German, Johns Hopkins University; John C. Kirtland, Latin, Phillips Exeter Academy; Walter Miller, Greek, Tulane University (now of the University of Missouri); and S. C. Stacey, Greek, Erasmus Hall High School, Brooklyn. Mr. Hale was made chairman of the joint committee, and Mr. Rounds secretary.

This joint committee has had three meetings, as follows: December, 1911, three sessions in Chicago; November, 1912, six sessions in Chicago; December and January, 1912–13, twenty sessions in Philadelphia. We have thus had twenty-nine sessions, and at these sessions, averaging well over three hours in length, we have met for a total of between ninety and a hundred hours. The largest number of the committee attending any one session has been twelve, and at no time has there been less than a quorum. Owing to the pressure of other duties, Mrs. Young has usually found it impossible to attend the meetings, and she has been represented by W. B. Owen, principal of the Chicago Normal School, who has been officially given a vote in the committee when serving in her place.

Before closing this report, it may be well to call to your minds the reasons which impelled this body, two years ago, to inaugurate this movement, and the further motives which have kept the members of this committee at this arduous and exacting task, which has made serious inroads upon their time, energy, and money. One of the greatest weaknesses of our educational system is the fact that a student, in his progress from one grade to another, one school to another, or one teacher to another, has to abandon and unlearn so much of what he has learned in previous school work. Nowhere is this situation more acute than in the various systems of terminology in our texts in English grammar. For instance, for the use of "good," in the sentence "He is good," there are nine different names, the more prominent being: predicate adjective, subject complement, subjective complement, attribute complement, adjective complement, complement of an intransitive verb, etc.; for the construction of "red," in "We painted our barn red," there are eighteen different names in the twenty-five texts I have examined. In the matter of the substantive in "-ing," as in "By being careful he was able to save money," the confusion is quite as bad, as it also is in the names of the modes, and the classification of verbs and pronouns.

The net result of this situation has been to bring the study of English grammar into disrepute. Teachers and examiners familiar with an older terminology, on quizzing students familiar with newer texts, find the students apparently ignorant of the most fundamental grammatical conceptions; students, in their turn, are disquieted and confused in the knowledge they do possess. The more carefully they are drilled in one set of terms and the more conscientiously they master their work, the greater is the shock which they experience when they find themselves obliged to unlearn

this carefully mastered material. It is a fundamental right of a child that he should be left secure in the possession of knowledge that he has once taken pains to master. Any formal truth taught to the child, and mastered by him, should be worth its face value at any subsequent point in his education. Every time we make a child unlearn a thing he has carefully mastered, we weaken his whole grip on that subject, and we lessen his respect for learning in general; for how can we expect him to maintain an enthusiastic attitude toward learning, when it is so frequently his experience that things he has been told are surely true, prove, when a new text is encountered, to be false, or, at least, out of date? The effect upon the young teacher, as she takes up an unfamiliar text, is utterly confusing and pernicious, and the student, of course, has to suffer doubly with her.

We of this committee, therefore, feel that we are engaged upon one of the most needed reforms of our educational system. We have now covered the whole field of grammar. The simplification we have accomplished will, we feel sure, commend itself to all. It is not possible that all of the actual terms we shall suggest can, in the nature of things, meet with the whole approval of any one person. But we have carefully considered every point. Each member has given up notions of whose truth he probably once felt thoroly convinced. We are hoping to present a report that will be unified and consistent, and whose prime consideration shall constantly be the needs of the elementary student and teacher of English. Our hope is that when the report shall appear, it may be received in a kindly, tho judicial spirit, and we believe that before any person sets himself against it, he should ask himself whether the good that would come from the adoption of the report would not more than balance the importance of any amendment that he might individually like to make.

Publishers have, on the whole, evinced a willingness to make necessary changes in subsequent editions of texts already in existence, tho this will mean great expense to them; surely we teachers and superintendents should be able to sink minor differences for what is so clearly a matter for the common good.

B. REPORT OF THE JOINT COMMITTEE OF THE NATIONAL EDUCATION ASSOCIATION, THE MODERN LANGUAGE ASSOCIATION OF AMERICA, AND THE AMERICAN PHILOLOGICAL ASSOCIATION, ON GRAMMATICAL NOMENCLATURE

WILLIAM G. HALE, HEAD OF THE DEPARTMENT OF LATIN, UNIVERSITY OF CHICAGO, CHICAGO, ILL., CHAIRMAN

The history of the joint committee up to the present time has been sketched by Mr. Rounds, and I need speak only of our aims and hopes.

If the work of this committee appeals to any body of educators in the country, it should appeal to superintendents and principals. Upon them,

as upon no other members of the educational system, falls the charge of seeing to it that part shall co-ordinate with part, and that the members of a group of related subjects shall help one another, instead of thwarting one another. I speak to you, then, as to our natural friends and best supporters. You easily recognize that it is confusing to a student, in passing from one English grammar to another, to have to associate his conceptions with a new set of names. But consider what happens if he goes on to study, say German, or French, or Latin, or any two or three of these. A new language, a new set of terms. It is as if the student of mathematics, having mastered the terms addition, subtraction, multiplication, factor, quotient, and the like, for arithmetic, had to learn to call the same things by new names when he came to algebra, and then by still different names when he came to physics. My children in their high school learned three different explanations for a certain construction which was one and the same in the three languages which they were studying. Similar things happened repeatedly. As a father, I feel that to be pitiable; as a citizen, I feel it to be wasteful; as an investigator, I know it to be ridiculous. If you will in your imagination picture upon the wall behind me a row of charts, one for English, one for German, one for French, one for Latin, etc., the whole being so arranged that the identical phenomena in these various languages stand in the same lines, you will get some idea of the appalling amount of needless and demoralizing labor which we now inflict upon our students thru the constant changing of the descriptive terms, and you will feel what an enormous gain in practical efficiency would result if, for a given phenomenon, one and the same term ran straight thru all the charts. And you will also recognize how largely the present apparent arbitrariness of grammar would disappear if, a given descriptive name having once been learned for a certain conception in a given language, no matter which, the student should thereafter find that same name for that same conception in whatever language he might take up.

For us English-speaking people, the whole foundation of grammatical study is laid in the study of English in the grammar schools. All our subsequent work, in whatever language, is based upon this. The joint committee has kept that fact constantly in mind. It has aimed at simplicity of terms, as well as at harmony. It also has recognized that distinctions which it might be desirable to make in the more advanced study of English, and in the study of other languages, might not be advisable to make in the grammar schools. The form in which its results will be displayed will be such that the English teacher in the grammar schools will experience no confusion. The matter which belongs to more advanced English study, or deals with additional distinctions to be made in other languages, will appear in a separate and later part of the report.

Mr. Rounds has chronicled our meetings, which are already many. Good work of this kind is necessarily slow. We have proceeded with the

greatest care, and the freest and fullest discussion. I have faith in both the clarity and the power of persistence of the American mind. We are hopeful that our results will commend themselves to our countrymen, and will affect ultimate decisions in other countries. The movements toward uniformity of nomenclature are now national. They will in time become international. Propositions looking to this end have in fact already been made in Europe. Meanwhile, a certain amount of communication has begun. I am myself a member of a committee, similar to our own, established by the Modern Language Association of Germany.

After our joint committee had been appointed, and when it was already considerably advanced in its work, a new organization, the National Council of English Teachers, was founded. It very naturally regarded the matter of grammatical nomenclature as one of great importance to its own work, and it appointed a committee to consider and report upon the subject. Mr. Rounds is a member of this committee also. The remaining members are Professor Gertrude Buck, of Vassar College, Chairman; Mr. Charles R. Gaston, of the high school, Richmond Hill., N.Y.; Mr. Alfred D. Sheffield, of Wellesley College; Professor John H. Cox, of the West Virginia University; and Miss Genevieve Apgar, of the Harris Teachers' College, St. Louis. In accordance with a vote of the joint committee, I have transmitted to the committee of the Council all our recommendations, for consideration and advice. The two committees are in active correspondence, and I have also personally seen and conferred with three members of the committee of the Council, besides Mr. Rounds, namely Miss Buck, Mr. Gaston, and Mr. Sheffield. We hope for mutual helpfulness between the two committees, and harmonious results.

Our greatest difficulty has lain in the cost of travel. The expense of repeated journeys from widely separated points is heavy, and the committee is not in a position to bear it. After we had met the cost of one meeting ourselves, it became clear that money must be raised for the minimum railway expenses, if we were to proceed. We have been obliged to beg, and must continue to do so. Even as it is, however, our work would have been seriously delayed, but for a generous advance made to us by Mrs. Ella Flagg Young, a member of the joint committee, appointed by the Department of Superintendence. We hope that the National Education Association will before long recognize the importance of the work which we are doing for the efficiency of language study in the schools of our country, and will come to our relief.

We are now engaged in the final stages of putting the report into shape, and hope to have it ready to be submitted, in printed form, at the meeting of the National Education Association in July, and at the meetings of the other two associations in the Christmas week.

The one defect in the movement upon which you have now heard our report of progress is that it seems to suppose that, after us, no change can

ever take place. It is obvious that our work will not be complete until some plan has been devised to provide for the careful discussion of any supposed improvements which future experience or future thinking may suggest to any teacher or student of language. Such a plan we hope to present at Salt Lake City.

May I add that it is a personal pleasure to me to take part in the work of the National Education Association, of which I have for many years been a member, and to have received my place upon the joint committee thru appointment by the Department of Superintendence. I did, in fact, offer a paper on this very subject for the meeting of this department in 1909, but too late. If I had been able to appear in the following year in Mobile, when Mr. Rounds addressed you, we might have begun our work together more than a year earlier than we did. And finally, that you may not, because of my being a Latinist and Grecian, look askance at me as chairman of a joint committee whose work covers English and the other modern languages, may I add that I owe my first commission in work of this kind, not to the American Philological Association, but to the Modern Language Association of America, which in February, 1911, after I had addressed it at the Christmas meeting of 1910, made me first a member, and presently chairman, of its Committee of Fifteen, charged with the work of devising a grammatical nomenclature for English, French, German, Italian, and Spanish. That committee will now, of course, make no independent report. The Modern Language Association will act only thru its share in the work of the joint committee. But I hope that the unexpected confidence which it showed in me in making me the chairman of its committee may serve at least to modify a possible presumption of the opposite kind in the minds of the members of the Department of Superintendence.

And, finally, I have repeatedly given regular high-school courses in my own subjects, in connection with teachers' training courses, and am doing so with a class of beginners at the present moment. I am familiar at first hand with the equipment in English grammar, and the diversity of nomenclature, brought from grammar school to high school; and I know the young mind at this point of its development.

II

SUMMARY OF THE REPORT OF THE COMMITTEE ON TEACHERS' SALARIES AND COST OF LIVING

ROBERT C. BROOKS, SWARTHMORE COLLEGE, SWARTHMORE, PA.

The purposes of the Committee on Teachers' Salaries and Cost of Living are set forth in the following resolution:

Resolved, That the President of the National Education Association be authorized to appoint a committee of seven active members, to consider and report to the Association its findings and recommendations concerning the salaries, tenure, and pensions of

teachers, the committee to take into consideration, among other things, the increased cost of living, the increased professional demands upon the time, strength, and funds of teachers, and whether the increase in teachers' wages has kept pace with the increase in the wages of other workers, the increase in the cost of living, and the increased demands upon teachers.

In pursuance of these purposes the present report has been prepared, a summary of the contents and principal findings of which follows.

PART I. THE INCREASED COST OF LIVING

In Part I, an attempt is made to state the more important facts regarding the increase in the cost of living in such form that teachers may make use of them in discussions of the question of salaries.

1. *Measurement of the increased cost of living.*—The United States Bureau of Labor found that in 1911 wholesale prices were 44.1 per cent higher than in 1897. Measured by wholesale prices, a teacher whose salary had remained fixed at $1,000 since 1897 would have had no greater purchasing power in 1911 than $693.76 possessed in the earlier year.

The increase in wholesale prices has, of course, been reflected to a greater or less degree in retail prices generally. In the case of fifteen staple articles of food the Bureau of Labor finds that from 1896 to 1911 retail prices increased 50.2 per cent. Figures for the first six months of 1912 show that the upward flight of retail food prices, which was temporarily arrested in 1911, has begun again with increased rapidity. In June, 1912, retail food prices were 61.7 per cent higher than the average for 1896.

While the 15 per cent rise of prices between 1896 and 1903 may have seemed of minor importance to the earlier Committee of the National Education Association on Salaries, Tenure, and Pensions, the subsequent rise has been so large and rapid that, in the opinion of the present committee, it cannot be left out of sight for an instant in any discussion or settlement of the question of teachers' salaries.

2. *Causes of the increased cost of living.*—To ascertain the causes of this great increase of general prices, and possible remedies for the inequities occasioned thereby, twelve eminent economic authorities were consulted. For their generous response the committee is deeply grateful. The answers given by them and summarized in this section of the report deal with the increase of the world's gold production, the protective tariff, trusts, high profits of middlemen and retailers, higher wages and trade unions, drift of population to cities and diminishing proportion of inhabitants on the farms, exhaustion of natural resources, and extravagance. Particular stress is laid by most of these authorities upon increased gold production as a cause of higher prices, and the proposal for an international commission on this subject, which some of them suggest, is favored as likely to at least direct attention to the facts, causes, and effects of the advance of prices in a way that may contribute materially to the proper adjustment of teachers' salaries to living conditions.

3. *Letters and references on the increased cost of living.*—In this section the letters on the increased cost of living, referred to above, are presented in full. The committee counts itself fortunate in being able to add thereto, a statement of the socialist position and two letters from advocates of the single tax on the increased cost of living.

4. *Cost of living in various sections of the country.*—Based upon an English investigation made in 1909, this section of the report discusses the relative cost of rent, of food, and of both combined in twenty-eight American cities located in New England and the East, the Middle West, and the South. A final table shows the amount of salary necessary on this basis in each of these cities to equal the purchasing power in rent and food of a salary of $1,000 in New York City.

PART II. ECONOMIC AND SOCIAL CONDITION OF TEACHERS IN CINCINNATI, HAMILTON, DENVER, ATLANTA, AND NEW HAVEN

1. *Purpose and nature of the investigation: Replies received.* The purpose of Part II of this report was to test the possibility of securing accurate data from teachers themselves on a number of points which must be considered in any discussion of the adequacy of their salaries. The communities chosen—Cincinnati, Hamilton, Denver, Atlanta, and New Haven—represent four distinct geographical sections of the country. In the discussion of the topics considered in Part II of the report, numerous comparisons are drawn between these communities with regard to such matters as age, sex, educational training, experience, salaries, etc., of teachers. In general these comparisons reveal the marked superiority of two, and the marked inferiority of one, of the cities studied. It is not intended, however, that the definite ranking of the five cities along certain lines should be interpreted as meaning either praise or blame. The principal purpose of these comparisons is to demonstrate the possibility of ascertaining by the committee's methods of inquiry the exact relative position of cities on a large number of points which must be considered in any discussion of the adequacy of teachers' salaries. Given a number of cities situated in the same geographical section and with approximately equal living costs, the results obtained in this inquiry show that such comparisons may be used to distinct advantage as bases of arguments for salary readjustments.

In certain teaching groups considered in the present inquiry, the number of persons reporting is so small that occasional statistical irregularities are noted. With an inquiry on a larger scale embracing many thousands of teachers, it is believed that such irregularities would disappear. Apart from the relative rank of the five cities along various lines, for which readers are referred to the text of the report, the following general statements with regard to the economic and social condition of teachers may properly be considered in this summary.

It is significant, both as to the willingness of teachers to answer detailed personal questions regarding their circumstances, and as to the representative character of the returns presented in this report, that altogether 1,735 papers out of a possible 3,611, or 48 per cent, were secured from the five above-named cities. In three cities more than 50 per cent of the teachers replied.

2. *Age of teachers.*—In this section of the report the average age of teachers by teaching groups and cities is shown. A table stating the number of women grade teachers by age groups reveals the presence in one of the cities of more than 40 per cent of such teachers under twenty-five years of age.

3. *Sex of teachers.*—In all five of the cities 13.1 per cent of the teachers are men. In two of them the percentage of men closely approaches the average for the United States as a whole as stated by the commissioner of education. The remaining three fall far below this average.

4. *Conjugal condition of teachers: Number of children.*—Of the 1,377 women teachers of all groups in the five cities, 1,283, or 93.2 per cent, are single. All men teachers under twenty-five years of age who replied were unmarried. From twenty-five to thirty years of age, 60 per cent; from thirty to thirty-five, 54.5 per cent; from thirty-five to forty, 22.9 per cent; from forty to forty-five, 11.8 per cent; and from forty-five to fifty, 14.3 per cent of all men reporting were single. Above fifty none of the men reporting were single.

The average size of families reported by married men teachers was small. In the case of one of the cities only does the average number of children per family exceed two. For all the cities the average number of children in the families of married men teachers is 1.79.

5. *Persons dependent upon teachers for support.*—It is frequently asserted that the salaries of men teachers are fixed with reference to the burden of a family, actual or prospective. To what extent are unmarried women teachers burdened with the support of others?

On this question detailed data are presented for Denver. Of the 266 women grade teachers of that city, 157, or 59 per cent, had others dependent upon them. The average salary of the unincumbered teacher of this group is $885.53, while the average amount of salary of those who are supporting others is $567.84 per person supported. Of the 30 single women teachers in the high schools of Denver, 14 support themselves only, and 16 have others dependent upon them for support. These 16 support 7 persons entirely and 19 persons partially. The 25 married men teaching in the high schools of the same city support entirely 103 persons (including themselves) and 15 persons partially. Working out the cost of such support on the basis of adults only, it is shown that the 14 unmarried women of this group with no others dependent upon them have an average from salary of $1,211.83 to meet their own needs exclusively; the 16 unmarried

women with others dependent upon them have an average from salary of $801.03 to spend for each adult person including themselves; while the married men have an average from salary of $413.49 for the equivalent of each adult person including themselves.

That the proportion of unmarried women teachers supporting others is large and the burden of such support heavy is shown for all cities and teaching groups by one of the tables in this section of the report. A single citation will illustrate the nature of this material. Of the 434 unmarried women grade teachers in Cincinnati, 264, or 60.8 per cent, are supporting others as follows: 28 male, and 34 female minor dependents, of whom 16 are totally and 46 partially supported; and 91 male and 303 female adult dependents, of whom 199 are totally and 195 partially supported. Other tables show the extent to which this burden increases with advanced years.

6. *Home ownership and tenancy of married teachers.*—In this section of the report the number and percentage of married teachers of both sexes owning their homes or renting them are shown by teaching groups and cities. Combining all teaching ranks in the five cities the percentage of married men teachers owning their homes is 57.32.

7. *Residence and amount paid for board and room by unmarried teachers.*—Section 7 of the report shows for unmarried teachers of both sexes the number (1) living with parents, (2) with other relatives, (3) boarding elsewhere, or (4) keeping house; and the maximum, minimum, and average amounts paid for board and room in the three former cases. The percentage of unmarried teachers not living with parents or other relatives is a rough index of the extent to which cities draw their teachers from outside localities. Wide differences in this regard are noted. In all five of the cities 28.75 per cent of unmarried teachers are living apart from parents or other relatives. As age advances a constantly increasing percentage of unmarried women grade teachers are found living apart from parents or other relatives. Figures stating the amounts paid for board and room emphasize the advantage generally, altho not always, enjoyed by those living with parents or other relatives. Also they show a very much higher living cost in some of the cities than in others. In Denver, the average weekly commercial rate paid for board and room by women grade teachers is $7.15; in New Haven, $5.42; in Hamilton, $5.15; and in Atlanta, $4.90.

8. *Average salaries and other sources of income of teachers.*—The purpose of this section of the report is to ascertain the amount of the earnings and other income of teachers in addition to their salaries. Particular importance attaches to the earnings derived from extra teaching or other outside work, altho interest on savings, etc., and income from property are also considered.

More than half of all the teachers in the five cities belong to groups adding less than 2½ per cent, and nearly 90 per cent belong to groups adding less than 5 per cent to their salaries from extra teaching or other outside

work. In practice, therefore, the opportunities open to teachers to supplement their salaries in this way are not very largely productive. Men enjoy very great advantages over women teachers in this respect. An outline showing the sources of the teacher's outside income is also presented. The overwhelming predominance in this list of sedentary clerical and indoor forms of work is a very disquieting feature of the situation.

9. *Savings of teachers during 1911.*—In round numbers unmarried women grade teachers in the five cities with average salaries of from $550 to $900 saved from salaries in 1911 an average of from $30 to $90. The larger percentages saved as salaries are advanced toward the prevailing maximum indicate a provident spirit among teachers. In Cincinnati and Hamilton, however, slightly more than one-third, in New Haven and Denver more than two-fifths, and in Atlanta very nearly two-thirds of the women grade teachers reported no savings in 1911. The relation between this unsatisfactory condition and low salaries is developed in the accompanying tables. Even among teachers of longer experience and higher rank the proportion of non-savers is large. Nor can the amounts laid aside by those who report savings for the year be considered satisfactory. Under existing conditions it is clear that the great majority of teachers are so situated that they cannot save enough from salaries to enable them to retire at their own expense.

10. *Property of teachers.*—Unmarried women grade teachers in the five cities report an average value of all property, real and personal, of $1,091.94. In one city the average for teachers of this group and sex is less than half of this amount. Similar averages are presented for all teaching groups by cities. A table showing the number of teachers reporting property holdings of various specified amounts also brings out the large number who have not succeeded in acquiring any property. Thus among unmarried women grade teachers the percentages reporting no property are as follows: Under twenty-five years of age, 67.07 per cent; twenty-five to thirty years of age, 52.83 per cent; thirty to thirty-five years of age, 38.88 per cent; thirty-five to forty years of age, 30.87 per cent; forty to forty-five years of age, 29.19 per cent; forty-five to fifty years of age, 20.21 per cent; fifty to fifty-five years of age, 21.43 per cent; fifty-five to sixty years of age, 14.28 per cent; over sixty years of age, 19.05 per cent. While the decrease in the proportion of the propertyless thus shown is gratifying, still the percentage of those even in the higher age groups who have acquired no property is alarmingly large.

A detailed study of single women grade teachers over fifty years of age shows that in Cincinnati only 5 out of 66, and in Denver only 9 out of 42 such teachers have property in excess of $5,000, which is probably the lowest possible amount upon which they could retire at their own expense—this in spite of the fact that the two cities referred to pay by far the best salaries to this group of teachers. Similar figures for other groups of teachers make clear the necessity for teachers' pensions.

Out of over sixteen hundred teachers of all ranks in the cities studied, only 13 were found to be worth over $15,000. A detailed examination of these cases shows that nearly all of them owe their good fortune to sources outside their salaries as teachers. The common observation that teaching is not a money-making pursuit would seem to be more than confirmed by the results of this investigation.

11. *Life insurance carried by teachers.*—Reports from teachers regarding life insurance indicate their strong preference for endowment policies, premiums for which are much higher per $1,000 of insurance than for other forms of policies. While the endowment plan combines a form of saving with insurance, it is doubtful whether it is the best policy for many teachers, especially for those who can look forward to retiring pensions.

The moral obligation resting upon married men teachers to insure their lives is recognized by a large majority of them. In Cincinnati and Denver only 13 out of 138 married men teachers are uninsured. The average amount of insurance carried, however, is far from adequate. Even combining insurance with property owned, only 4 out of the 138 married men teachers referred to above would, if they were to die now, leave estates aggregating over ten times the average salary they are now receiving. Nearly two-thirds of them would leave estates amounting to less than five times their average salaries. Death of the breadwinner in the majority of such cases would inevitably mean a sharp reduction in the standard of living of the survivors.

12. *The teacher's working-day.*—In addition (*a*) to the number of hours required to be in the schoolroom, this section of the report endeavors to ascertain (*b*) the number of hours spent in grading papers, preparing lessons, and other work directly connected with teaching, and (*c*) in meeting other professional demands. Due to the habit of taking the first of these items only into account, it has long been a popular fallacy that the teacher's working-day is a very short one. Considering all three items, the reverse is shown to be the case. Thus in Denver, men high-school teachers report an average per school day of 5 hours and 43 minutes in the classroom, 2 hours and 7 minutes in work directly connected with teaching, and 56 minutes in meeting indirect professional demands—a total of 8 hours and 46 minutes. Similar figures are presented for each teaching group in the five cities. An extended outline containing more than one hundred items shows the nature of the direct and indirect professional demands upon the time of teachers. Taken in connection with the figures noted above, it goes far toward establishing the contention that the working-day of the teacher, which, in appearance is so short, may, with due consideration of the nervous strain and extra duties involved, really be long and burdensome.

13. *Educational and professional training of teachers.*—In this section of the report detailed figures show the average number of years spent by the various teaching groups of the five cities in (*a*) common schools, (*b*) high

schools, (*c*) normal or teachers' colleges, and (*d*) colleges and universities. An attempt is also made to estimate (*e*) the amount of training received in summer schools, extension courses, etc. Figures showing the number of teachers who have received degrees, and the nature of these degrees are presented in another table. One striking feature of this section of the report is the very great improvement shown during recent years in the standards of preparation of women grade teachers in Cincinnati.

14. *Training, experience, and salaries of teachers.*—In this section of the report the average number of years of training of teachers in normal and teachers' colleges only is considered. Training in this sense of the word and teaching experience are considered partial indexes of efficiency and compared with the salaries paid to various groups of teachers. Very considerable discrepancies are disclosed in this way, but, on the whole, it is shown that the cities which are paying higher salaries are also securing the services of distinctly better trained and more experienced teachers.

15. *Expenditures of teachers.*—Under this heading an effort is made to ascertain the burden of direct and indirect professional demands upon the funds of teachers. The expenditures and percentages to total expenditure of 58 married men teachers for rent, clothing, life insurance, religious purposes, charity, amusements and vacation, care of health, etc., are analyzed in detail. So far as results from so small a number of families may be depended upon, they indicate the effect of community standards upon teachers' as compared with working-men's budgets, for rent and clothing. In the case of the latter item, the smaller average size of teachers' families reduces the economic burden somewhat—a doubtful gain from the social point of view. Teachers also spend relatively more than working-men for life insurance, religious purposes, charity, amusement and vacations, and care of health. Grouping the following five items, (1) dues of teachers' clubs; (2) educational books; (3) fees for institutes, lectures, normal courses, summer schools, etc.; (4) contributions to school activities; and (5) transportation costs due to attendance upon institutes, meetings of state and national education associations, etc., it is shown that the expenditures of the married men teachers above referred to in meeting these directly professional demands upon their funds amount to from 1.16 to 6.94 per cent of their total expenditures. Seventy unmarried women teachers report expenditures of from 1.07 to 5.14 per cent in meeting these demands. In both cases the burden is heaviest upon teachers with smaller incomes. Board, room rent, and clothing in the case of these seventy unmarried women teachers account for from 57.69 to 78.50 per cent of their total expenditures. In general, it is the smaller incomes which show the higher percentages for these three purposes. It is evident that where so large a proportion of teachers' salaries is claimed for the elementary necessities of food, shelter, and clothing, scant margin is left for vacations, care of health, self-improvement, and provision for the future.

16. *Teachers' salaries and salaries of other municipal employees.*—In Section 16, a detailed comparison is made between the salaries of teachers of all ranks and the salaries of other municipal employees in Cincinnati, Denver, Atlanta, and New Haven. In all four of those cities the compensation of grade teachers is shown to be less not only than that of many groups of skilled manual workers, but also in numerous cases, to be lower than that of common or unskilled labor. It is also noteworthy that the highest salaries obtainable in the school service beneath that of superintendent (e.g., by principals of high schools, supervisors, principals of larger schools, etc.) are much lower than the salaries paid to heads of departments and many of their subordinates in the city's service.

17. *Summary of general statements of teachers.*—At the end of the questionnaire employed by the committee, teachers were asked for any further statement they might care to make upon their compensation or standards of living. Nearly one-third availed themselves of this opportunity. The more significant of these statements are quoted in Section 17 of the report under the following headings: Cost of preparation for teaching; Comparison of teaching with other professions and trades; Standards of living required for teachers; Inadequacy of salaries with regard to recreation, social life, travel, music, literature; Inadequacy of teachers' salaries with reference to further professional study to enhance efficiency as teachers; Provision for family life, for dependent relatives, and for old age; Savings; Certain specific cases of alleged underpayment; Outside work necessary because of inadequacy of teachers' salaries; Salaries inadequate to attract or retain efficient men and women; Special expenses and economies of teachers; Persons dependent upon teachers for support; Effect of teaching upon health; Criticisms and suggestions for reform. Whatever evidence of bias or downright error there may be in some few of the statements quoted under the above headings, it is felt that as a whole they present a remarkably frank, interesting, and significant summary of the thought of many teachers with reference to their present economic environment. One of the most noteworthy of these expressions is contributed by a woman employed in the grades of the Denver schools. "A teacher's salary," she writes, "should be sufficient to enable her to live comfortably, dress simply but in good taste, supply books, etc., in order that she may keep abreast of her profession, furnish such vacation and other recreation as shall repair physical and nervous waste, lay aside (without being niggardly) means to meet accident, illness, or temporary loss of employment, and maintain insurance that shall furnish a retirement fund when she must lay down her work."

PART III. SALARY SCHEDULES, TENURE, AND PENSIONS

Part III of this report presents data with reference to the present status of salary schedules, tenure, and pensions in the United States in

such form, it is hoped, that teachers interested in these subjects may find suggestions and legal precedents for desirable changes in existing local arrangements.

1. *Teachers' salary schedules and appointment and tenure of teachers in city school systems of the United States.*—Under this section the principal forms of salary schedules now established in the cities of the country are discussed, particularly with reference to the conditions under which teachers are advanced from minimum to maximum salaries. Prevailing methods of appointment and dismissal of teachers are also considered.

2. *Teachers' pension laws in the United States.*—Three principal types of pension laws, the non-contributory, the compulsory contributory, and the voluntary contributory now exist in the United States. The characteristics and distribution of these types are considered, following which excerpts from the pension laws of the various states are presented. With this material before them teachers and others interested in enactments of this character should be able to find legislative models suited to their needs.

III

ECONOMY OF TIME IN ELEMENTARY EDUCATION

A. A REPORT ON PROGRESS BY THE COMMITTEE ON ECONOMY OF TIME IN ELEMENTARY AND SECONDARY EDUCATION

H. B. WILSON, SUPERINTENDENT OF CITY SCHOOLS, DECATUR, ILL., CHAIRMAN

By the time of the meeting of the department one year ago, when your Committee on Economy of Time made its début, we had merely defined the scope of our work in general terms and in outline form. We presented our definition and understanding of the scope of our work before a meeting of the Council asking advice and seeking criticism. The brief discussion there and the correspondence which followed have been of inestimable value to the committee and we hereby express our appreciation for this co-operation and help, and bespeak for our committee an increasing amount of advice and counsel in the problems just ahead.

At the St. Louis meeting the scope of the committee's work was extended to include secondary schools, thereby making the committee responsible for the study of economy of time and effort thruout the public schools. At this meeting also the department requested the Council to recommend to the Committee on Investigations and Appropriations the setting-apart of $250.00 to defray the necessary expenses of the committee in discharging its duties. In due course the appropriation was made. Much of the work which the committee has been able to do would have been wholly impossible but for the fact that funds were available with which to conduct the work.

As we conferred, and sought to understand our work, it became evident that the task assigned us could not be discharged by the gathering and compiling of offhand opinions and theories. Nor could it be properly executed in a brief space of time. In fact, the committee has assumed that what is needed is not hasty, convincing recommendations, nor even convenient programs for securing possible economies in education, but rather a number of well-directed, fundamental studies of problems related to the general problem of economy, together with a careful examination and evaluation of all practical efforts now under way to effect economies.

The committee has sought to work along those fundamental lines which seemed to promise most immediate results, doing first, frankly, what seemed most feasible. In the course of the year progress has been made along at least the following lines:

First: The outline defining the scope and organization of our work has been somewhat extended. In its enlarged form, it is submitted here as a part of this report that it may be available for reference.

Economy of Time in Elementary and Secondary Education

I. Definition: (Logically first but must be answered last).
   1. Is economy of time to be sought thru lessening the time devoted to elementary and secondary school work?
      If so, should total time devoted to elementary and high school be lessened?
   2. Or is economy of time to be sought thru securing larger results in the time now consumed?
   3. Or is economy of time to be sought thru a combination of 1 and 2?

II. Lines of investigation in seeking solution:
   1. Study of child.
   2. Study of society.
   3. Course-of-study problems:
      A. Modifications needed as to content?
         a) Eliminations needed to remove archaic and least useful materials.
         b) Significant additions necessary.
      B. Modifications needed to secure economic amalgamation and wise correlation of subjects. What separate subjects or lines of work should the program of studies provide for?
      C. Modifications needed to secure that sequence of work which is essential in socializing and psychologizing the materials of instruction.
      D. Modifications needed to secure such differentiations in work as are advisable in upper grades.
      E. Modifications needed to secure flexibility in adapting to varying abilities and to different communities.
   4. Problems relating to teachers:
      A. Giving them an adequate vision as to the function and possibilities of public education in our democracy.
      B. Securing sufficient efficient, artistic (appreciative, sympathetic) teachers.
      C. Perpetuating their academic and professional growth.
      D. Preventing waste resulting from short professional life of teachers.

5. Problems relating to teaching.
   A. Securing adequate motivation of children's work. Importance of texts in use.
   B. Eliminating useless, meaningless, ineffective procedures.
   C. Varying the technic of teaching to suit the outcomes or results sought.
6. Problems of organization:
   A. What systems of grading and promotion are most advantageous in securing economy of time? (Effects of attendance; preventing failures; avoiding retardation.)
   B. Advantages of special schools or classes in securing economy of time?
   C. Relation of differentiated courses with reference to vocational ends to problem of economy of time? See D under 3.
   D. Relation of vocational guidance to securing economy of time?
   E. How may the schools be directed and used in the interest of modifying the public attitude toward educational effort?
7. Problems of school time:
   A. Age of entrance.
   B. Length of school year.
   C. Length of school day.
8. Development of standards which shall
   A. Set ends for attainment.
   B. Enable the measurement of results secured.
   C. Indicate need of estimating economy of time.

Second: We have given some attention to the matter of bringing our plans and purposes to the attention of others. This we have done thru various educational journals, and by availing ourselves of opportunities which have presented themselves to suggest to the executive committees of various educational organizations the feasibility of making "Economy of Time" the central theme of the programs for which they are responsible. Fortunately, this topic is beginning to receive definite attention in educational programs. For example, this will be the central theme of the program of the next meeting of the Northern Illinois Teachers' Association. The executive committee of the High-School Conference of the University of Illinois has recently constituted a committee to consider the economies which are possible between the high schools and the junior college. The University of Chicago is organizing the spring conference between co-operating high schools and the university about the question of the economies which may be accomplished between the high schools and the university. Recently the supervisors and principals of the St. Louis public schools who are doing advanced extension study in the Harris Teachers College invited the presentation of the topic, "Economy of Time in Public-School Education," with the thought in mind of undertaking the study of certain phases of the topic in co-operation with your committee. Since then, Principal J. W. Withers, of the Harris Teachers College, reports the following studies under way:

1. Owing to the elastic system which prevails in the St. Louis public schools, a considerable number of individual promotions occur in all the schools each year. A study

is now being made of a large number of cases to determine the effects of rapid individual promotion upon the subsequent progress of these children thru the grades.

2. Study is also under way to determine the loss occasioned by the transfer of pupils from one school in St. Louis to another, and from other school systems to that of St. Louis.

Your committee feels that along with the theoretical and fundamental study of the general problem should go these practical efforts to secure aggressive study and presentation of the topic, or phases of it, on the part of other educational bodies or organizations.

At this time, in addition to the matter in the National Education Association *Proceedings*, which has emanated from the Council committee on this problem, we are able to point to a few discussions in educational literature which are directed definitely to the problem your committee is concerned with. It seems worth while to note these here:

In the National Education Association *Proceedings* of the Chicago meeting the following discussions appear: "Suggestions from Cases of Unusually Rapid or Irregular Progress in Public Schools," by Elmer E. Jones; and "Need of Standards for Measuring Progress and Results," by W. C. Bagley.

In the *Proceedings* of this meeting all of the papers presented at that portion of this session assigned to the Committee on Economy of Time, and all of the papers presented at this afternoon session, will be found to pertain to the general problem of economy of time.

The following articles or pamphlets are of definite value in this connection also: "Some Experiments in Elementary School Administration," by Samuel W. Brown, 1910, New York State Teachers' Association *Proceedings*, pp. 69–78; Publication No. 61, *The Relation of Physical Defects to School Progress*, by Leonard P. Ayres, of the Russell Sage Foundation; Publication No. E 126, *The Spelling Vocabularies of Personal and Business Letters*, just issued, by Leonard P. Ayres, of the Russell Sage Foundation; "The Duplication of School Work by the College," by Dean Angell, of the University of Chicago, *School Review*, January, 1913, pp. 1–10; "The Meaning of Secondary Education," by Charles H. Judd, of the University of Chicago, *School Review*, January, 1913, pp. 11–25; "The Seven-Year Elementary School," by officers of the School of Education, University of Chicago, *Elementary School Teacher*, February, 1913, pp. 274–86.

The committee is anxious to learn of additional literature bearing directly and significantly upon this problem and will welcome help in this connection.

Third: Probably the most significant thing done by the committee during the year was the holding of a conference with two groups of co-operating experts at the Auditorium Hotel in Chicago in December. These experts represented, on the one hand, those who were engaged in the work of administering public education, and included the vice-principal of a private school, the principal of a university high school, and superintend-

ents of schools. In the other group were those engaged in the teaching of graduate courses in education and in the directing of educational research. Representatives from the departments of education in the University of Missouri, University of Iowa, University of Illinois, University of Chicago, and Columbia University were present, as also was the head of the division of education of the Russell Sage Foundation. These two groups of experts met in conference with the committee thruout an entire day, each presenting some phase of the general problem of economy which it had been agreed in advance he would discuss. At the conclusion of this day of discussion and cross-discussion, we turned our attention to the matter of breaking up into minor problems the general problem of economy of time and of assigning to each co-operating expert such minor problems as he was willing to undertake to direct the study of.

It was not found possible to define definitely a number of the problems which were suggested tentatively, so that a number of them still remain unassigned. The committee will be glad to indicate to those interested, problems which have been suggested for study which have not yet been assigned. The following studies are now definitely under way:

Professor W. A. Jessup, of the University of Iowa, has under investigation "The Useless Duplication in the Presentation of the Subject-Matter of Arithmetic," and also the problem of determining "The Actual Time Devoted to Schooling in the United States." It is probable also that he will undertake, in conjunction with Professor W. C. Bagley, of the University of Illinois, "The Standardization of the Minima in the Special Subjects of the Elementary Curriculum in Relation to the Outcomes Desired and in Relation to Economy of Time."

Professor W. C. Bagley will undertake "The Standardization of the Minima in the Subjects of the Elementary Schools," turning his attention first to the minima in the subjects of history and arithmetic.

Professor W. W. Charters of the University of Missouri, has indicated a willingness to direct the study of "The Wastes Due to the Short Professional Life of Teachers Due to Low Salaries," and "Economies Resulting from Perpetuating the Academic and Professional Growth of Teachers."

Professor G. D. Strayer, of Columbia University, now has a graduate student at work upon "The Extent to Which State Organization of Public Education May Operate to Secure Economy of Time."

Professor C. H. Judd, of the University of Chicago, will contribute to the study of the general problem from the practical standpoint by the experiment which is now under way in the elementary and high schools in connection with the University of Chicago, whereby it is hoped to save the students, going thru those schools, two years by the time of entrance into the senior college. Not only will the program in operation there be available for study and discussion, but likewise the tests of the results secured from the experiment as it moves forward will be available.

Dr. L. P. Ayres, of the Russell Sage Foundation, has indicated his willingness to undertake the investigation of any phases of the problem which should not be left to research departments in universities.

Professor Frank E. Thompson, of the University of Colorado, a member of the committee, has been gathering information as to researches under way in various universities. The inquiry indicates that but a few institutions have as yet thought concretely of the problem. Of one hundred schools addressed, forty-eight have been heard from, and twenty-eight of these report work more or less upon the question, as follows:

Economy of time in all subjects of instruction in elementary and secondary schools; perfection of the organization and close correlation of courses to eliminate repetition and avoid omission; study of typical towns on problem of retardation, especially the effect of changing schools; economy of periods of work and rest; hygiene of daily program, of home study, of recess periods; length of elementary course; what getting command of a topic means; time allotment in cities in the United States; efficiency in college work; effect of establishment of numerous classes for exceptional children; organization of seventh and eighth grades; departmental teaching; differentiation of courses; hygiene of the learning process; the various factors involved in initial memorizing and review; length of the school day, month, year, etc.; mobility of the teaching population; tenure of office for the superintendent and principal; the state's control of the child; the efficiency of township consolidated schools; comparative study of the progress of high-school pupils trained in rural schools and in city grades; the value of special preliminary drill work in arithmetic; the course of study in arithmetic in two hundred schools.

Professor Thompson is investigating and compiling information upon several items of the syllabus with indications at present about as follows: "Varying the technic of teaching to suit the outcome or results sought." The results of teaching are more than we have supposed dependent upon the teacher; there is great need for specialists in each subject who have farsighted sympathy with children; there is need for much differentiation of method and wise selection of subject-matter to suit the different abilities and temperaments of children; children should be taught to use books not to memorize them; the teacher should know how to eliminate and rearrange within each lesson; teachers should learn to utilize the recitation period for study—should teach less and give the children a chance to learn; teachers should be cured of ritualism; the teaching should be adapted to the nature of the subject; the child should be given more time in which to assimilate material; and, above all, the teacher's aim should be clearer than it usually is.

"What systems of grading and promotion are most advantageous in securing economy of time?" Much advantage seems to attach to departmental teaching thru the most of the grades; the ungraded class is capable of large use; schools can grade into more divisions—for example, twenty-five teachers, twenty-five grades; the subject-matter must be better graded and more attention can be given to correlation and sequence within the subjects themselves as well as between them.

"Advantages of special schools and classes in securing economy of time": More special accommodations must be provided mentally deficient and physically deficient children; the bright must be given a better chance but not of necessity in separate classes; there must be more use of summer vacation, and open-air schools; industrial schools, co-operating schools, and the like must be devised and used more than now.

President O. I. Woodley, of the State Normal School of Fairmont, W.Va., member of the committee, is undertaking to secure co-operation from the state normal schools in the United States similar to that which

Professor Thompson is developing with the universities. He also has under investigation for future report "The Waste in Education Due to Improper and Inadequate Concepts."

Professor J. F. Hosic, of the Chicago Normal College, chairman of the committee representing the English teachers on the reorganization of public-school courses in English, indicated definitely his intention to hold in mind the necessity of organizing the English courses in such a way as to further every possible economy. To this end he will arrange to keep in touch with the work of your committee that his committee may work in light of such results as may be available from time to time to your committee.

A number of university men who are conducting graduate courses and directing research work in addition to those who attended the conference have expressed a definite interest in the plans of the committee and have indicated a willingness to co-operate in any way they may be able in furthering this work.

Within the last few days investigations have been arranged for as follows: "The Economy of Time and Results in the Teaching of English," Professor W. W. Black, director, School of Education, Indiana University; "Efficacy in Teaching Spelling Rules," Dr. C. W. Stone, director of Training School, State Normal School, Farmville, Va.; "Economy of Time Thru—(*a*) Scientific Administration of Educational Hygiene; (*b*) The Prevention and Cure of School Ailments," Professor Louis W. Rapeer, Department of Psychology and Education, New York Training School for Teachers; "Economy of Time in City Training Schools and in High Schools as Related to City Training Schools," Frank A. Manny, director, training of teachers, Baltimore, Md.

During the next year we feel very certain that a number of men in addition to those who are now at work in a co-operative way will undertake studies and investigations which will be of fundamental value in furthering the work of the committee.

Clarence D. Kingsley, agent, Massachusetts State Board of Education, and chairman of the Committee of the Secondary Department of the National Education Association on Articulation of High Schools and Colleges, has indicated that thruout the various phases of their work they shall hold in mind the necessity of providing for eliminations and for such organization of their work as will result in greater economies in secondary education.

The thought of your committee is that the results of these investigations shall be rendered available as rapidly as possible thru the pages of our educational magazines or thru publications by this department, all of them being regarded, perhaps, as contributions to the problem of economy of time. Within the next year, also, there is reason to expect that it will be possible to compile for consideration a number of worth-while experi-

ments which are under way in different city systems in the United States, and also to secure some valuable returns from the scientific studies which a number of city superintendents are planning to undertake in connection with their more progressive teachers.

Superintendent J. H. Francis, of Los Angeles, Cal., a member of our committee, already has a number of things under way, some of which he will indicate in his address. Superintendent F. E. Spaulding, of the committee, supplied me the following memorandum in reference to some of the ways in which they are trying to economize time in the Newton schools:

1. We admit to high school practically all pupils of high-school age, regardless of the completion of the grammar-school course. We are adapting the work and methods of the high school to pupils thus admitted. This plan is proving very successful. (A pamphlet on this subject entitled, *A Novel Experiment*, has been issued.)

2. Thru extensive use of group work, individual work, small classes, special classes and rooms, special assistants and extra teachers, we aim to advance every pupil as rapidly as his ability permits, and not more rapidly, consistent with his health and general well-being.

3. We are modifying somewhat the curriculum in the higher grammar grades, the better to adapt it to different types of children.

4. We are trying to work out a practical scale for English composition, suggested by the Hillegas-Thorndike Scale, which was tested but found inadequate.

5. Groups of principals and teachers, representing in each group both our high schools and grammar schools, are working on several definite problems of correlation between the grammar schools and the high schools. For example: One group is studying the organization of the grammar schools, on the one end, and the high schools, on the other, in their effects upon the pupils coming from the grammar to the high schools, with the purpose of so modifying the organization of these two types of schools that the transition from the one to the other will not be disadvantageous to the pupil. Other groups are working on similar problems respecting the content and method of instruction in English, science, mathematics, and history in the grammar and in the high schools.

6. Some studies are being made in the elementary schools in an attempt to work out normal standards of time necessary to accomplish given definite results; for example, the mastery of certain topics in arithmetic, as the process of long division.

7. We are trying to determine the limits within which fall the most advantageous number of recitation periods per week for a high-school pupil. (I expect to make some reference to this matter in my paper at the Friday afternoon session.)

The needs from the standpoint of this problem as your committee views them may be briefly summarized as follows:

1. Greater publicity as to the desire of the committee to learn of efforts to economize time which should be studied for the contribution they may have to make.

2. More specific discussion of various phases of the problem in local, state, and national educational meetings with attention directed to concrete undertakings and results and to scientific studies of significant phases of the problem.

3. More extensive study of the topic in the professional meetings of teachers in service, and by students in normal schools, and schools of education who are looking to teaching.

4. More testing out of plans which look to the saving of time and energy. It is extremely important that a large number of school systems test out various procedures which may contribute to economy of time. The committee is anxious to communicate with any persons who will co-operate in this way.

5. The further perfection of those scales of measurement which have been proposed for use in standardizing the results in writing, arithmetic, and English composition, and the development of scales applicable in the standardization of results in other studies, to the end that definite standards of attainment in a given time may be indicated for the guidance of supervisory officers and teachers in the various subjects of study.

6. A larger number of co-operating experts who will undertake the study and investigation, with students who can do scientific work, of additional phases of the problems.

7. The publication, as rapidly as they are available, of fundamental studies pertaining to economy of time and of the results of practical efforts to save time in public-school education.

8. A continuation of the committee for another year and the provision of $500.00 with which to further the work of the committee.

B. A SEVEN-YEAR ELEMENTARY SCHOOL

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The elementary school of the University of Chicago has been working for some years on the problem of saving the time of the pupils so that they may enter the high school at an earlier period than has been the custom in the regular eight-year course which has up to this time been administered in this school. It is evident to all students of education that in one way or another time is wasted, or at least not as well spent as it might be. Teachers realizing that they have more time than is required to cover a given amount of work relax somewhat in their instruction and the class is less well instructed than it might be. Lack of activity on the part of the pupils is then interpreted as due to the difficulty of the course and further reduction of the requirements follows until the rate of intellectual movement in the upper grades is distinctly slow. This manifests itself in many schools in an error which everyone tries to avoid but is likely to fall into either in the elementary school or in the first year of high school, namely the error of excessive reviewing. In the case of the university schools there was undoubtedly repetition in several of the high-school courses of matter and methods which had been adequately taken up in the elementary schools. In some other schools excessive reviewing appears in the seventh grade. This reviewing is repeated in the early part of the eighth grade, and the latter half of the eighth grade is very commonly given over to a general review of the work that has been done in the elementary school, in preparation for the high school. All this reviewing, even where it has been consciously carried out, seems to be regarded as ineffective, for as soon as the student enters the high school, he finds himself dealing, as indicated above, in many of the subjects, with materials and methods which he has canvassed before in the elementary school. The natural result of such repetition is that the student manifests no interest in the work that is offered to him in the first year of the high school because he has already become acquainted with it in the upper grades of the grammar school.

If it is urged that this reviewing is necessary on the principle that the elementary work must be done with great care so as to avoid any possibility of failure in the high school, there is double reason for the contention that the high school must recognize exactly what has been accomplished in the elementary grades, and the teachers in the high school ought to be called upon to take advantage immediately of all of the preparation which the children have for advanced work. The fact is, however, that high schools and elementary schools very often have little or no articulation. For example, a committee of the National Council of English Teachers declared the problem of relating elementary English to high-school English to be a new and unsolved problem. It is evident to the student of education that in most schools students bear the burden of maladjustment in these matters. The elementary school is overanxious and overburdened with strict supervision, while the high school is neglectful of its duties. The student is made to repeat unnecessarily and is left in a bewildered state of mind because the teachers have not worked out an adjustment.

It was the belief that the school could work out the relation more efficiently that prompted the university schools to attack the problem of economy. Teachers in the high school were called into conference with the teachers in the later years of the elementary school, and the matter of each of the different subjects was canvassed in detail in order to find out exactly what was being done in the seventh grade and in the eighth grade and in the first year of the high school, and how far all the different lines of work were interrelated.

It should be noted perhaps at the outset that the program of the elementary school is somewhat fuller than the ordinary program in public schools of elementary grade. For example, all of the children of the university elementary school take one foreign language beginning with the fourth or fifth grade. The result is that each pupil arrives at the eighth grade with some speaking knowledge of either French or German, according as he may have elected to take the one language or the other during his elementary course. Furthermore, it may be pointed out that the elementary school gives a good deal of attention to nature study. Work in the garden alternates with studies in physics, hygiene, general zoölogy, and botany. This type of work is cultivated to a degree unusual in elementary schools. In like fashion, a good deal of emphasis is laid on the cultivation of skill thru manual arts and the development of knowledge of the industries. Sewing, weaving, and constructive work are taught in the lower grades; the girls are given more complete courses in sewing in the upper grades, while the boys take shopwork; both boys and girls take printing in the upper grades. In short, the effort to economize time is not to be confused with any effort to reduce the elementary course to its lowest possible terms in point of content. The undertaking is to be described rather by saying that the school is organized to include all that can legitimately be included in an

elementary education. Its full content is then to be administered in such a way as to save as much time as can be saved by the best possible organization. It should be explicitly noted, therefore, that the reduction of time involves no curtailment of the various extra lines of work. The work in foreign language, in science, and in handwork is recognized as altogether as important as other lines of work in the school; and it was understood from the outset that if the reduction of time was to be legitimately made, it must be made in such a way as not to jeopardize the interests of these special subjects. The whole attention of the school was concentrated upon the problem of a more effective correlation of the two schools without depriving the students of anything.

The type of economy which it was the aim of the school to secure can best be illustrated by referring to the various subjects of instruction. Thus, the high-school teachers did not find it easily possible to take advantage of the training which had been given in the elementary school in modern languages. The German teachers and the French teachers of the high school held that the kind of work which had been done in the elementary school did not correspond exactly to the work that had been done in the high school in the first-year course. They found therefore that students who came from the elementary school could not be admitted to the second year of the high-school classes without interfering in some degree with the ordinary organization of the courses. The organization was therefore inhospitable to the child. The pupil had done such work as was required of him, but little or no recognition could be given to the elementary work by the high-school departments because their organization did not connect directly with the elementary work. A second example of failure to articulate appears in the science work. For a long time the students from the elementary school were put into the same kind of science work as children who came to the high school from elementary schools where less attention had been given to science. Again, elementary manual training was given in the high school and was required of all, including those who had done similar work in the university elementary school.

It would have been altogether disastrous to the organization of the two schools to have made any sudden move. In the first place, the teachers who would have been involved in any such sudden arrangement would not have had time to adjust their work, and the children would have experienced the ill effects of an experiment for which the teaching corps had relatively little sympathy. The first step therefore was to bring together the various members of different departments, and to establish relations which would make it easily possible for the high-school teachers and the elementary-school teachers to look at the problem from the same point of view. For example, the modern-language teachers were called upon to examine each other's work and to suggest any modifications that were necessary in order to allow the children to pass directly from the elementary

work into the advanced stages of the work in the high school. Indeed, certain forms of organization were undertaken to make this transition easy. It was said, for example, that children who came from the elementary school are somewhat less mature than the children who have passed thru the first year of high school. For two years, therefore, the children who came from the elementary school, and had taken a good deal of German, have been allowed to do a small amount of German during the first year of the high school until they should obtain the maturity supposed to be necessary in order to make it possible for them to stand on an exact equality with the students in the second year of the high school. This compromise organization is on the whole not very satisfactory, but it furnishes a method of passing without shock from the general inco-ordination with which the organization started to the final arrangement in which it is hoped the adjustment will be complete. In the meantime the teacher of the elementary school has been called upon to give some of the work in the first year of the high school, and modifications have gradually been made in the work of both the elementary school and the first year of the high school until there seems to be reasonable promise of a complete co-ordination.

The English departments of the two schools were asked to meet together and to canvass in detail all of the work given in the eighth grade and the work given in the first year of the high school. This careful study of the problem very soon brought out the result that both schools were dealing with the same type of material, and in much the same fashion. Only very slight modifications were necessary in order to justify the promotion of the children who had done the work of the eighth grade in the elementary school directly into the second year of the high school. This promotion into the second year of the high school avoided all of the repetitions that had formerly been committed in the first year of the high school.

So far as science was concerned, it was very simple to allow the children from the elementary school to omit the first-year science course. In the university high school this first-year science course is a general course dealing with phenomena that are at once physical and biological. The problem of giving credit for this science course is perhaps not as simple as the problem of giving credit in the other departments, but the permission, indeed the requirement, to omit the first year of science in the high school has been put into full operation.

The discussion of manual training led to a modification of the course as administered in the high school, so that now elementary handwork is not required of first-year children who have had such work in the elementary school. This readjustment is generally advantageous, because not only the university elementary school, but many other schools also, are introducing enough handwork to justify a somewhat more advanced type of work when the pupils enter the first year of the high school.

The problem of mathematics was somewhat more complicated. The

traditional division between arithmetic and algebra, which marks the boundary line between the elementary and the high school, is not so easy to transcend. There can be very little doubt to the mind of the careful observer that this traditional division is not justified by the needs of pupils. A great deal of the work that is done in arithmetic in the elementary school in the later years is valuable merely because it presents complicated opportunities for developing reasoning processes in the children. As a training in mathematics these problems are of very doubtful value. They involve only the relatively simpler mathematical processes, and these mathematical processes are imbedded in a situation which must be visualized and disentangled before the student can properly apply what he knows about arithmetical operations. It would be very much more educative, in many cases, to solve these complicated problems that are given in arithmetic by algebraical formulas. For example, if a symbol of the unknown quantity could be employed in the calculations, the method of solving the problem would be better from the point of view of the child's development. If the principles of solving the equation were understood, the solution of many an arithmetical problem would be rendered very easy. Yet there is a strong tradition against the introduction of the unknown quantity and the simpler methods of solving equations into the elementary-school course. From time to time algebra has been taught in the upper grades of some elementary school only to be timidly dropped because of the anxiety of someone about the traditions of elementary education. In spite of reason the high school has accordingly kept its hold on algebra and its methods. In the same way, geometry has traditionally been the property of the high school. Little by little the elementary school has been introducing certain constructive problems which deal with the simpler properties of space, but even here it has not been regarded as heretical to call such work by the name of geometry because geometry has always been given as a high-school course.

The experiment in the university elementary school proceeded therefore very cautiously in this matter of mathematics. The mathematical work usually required of the eighth grade was completed in due form. Last year, with an eighth grade that had advanced well in matters mathematical, a certain amount of high-school work was tentatively undertaken, and it was found that the eighth grade could take, in addition to its regular arithmetic, approximately half a year of high-school work in algebra and geometry. It should be said that the mathematical course given in the university high school consists of certain algebraical and geometrical problems which are worked out together. Exactly the same course was followed with the eighth grade. In order to corroborate the judgment of the instructors that the eighth grade had done the work satisfactorily, a test prepared by the high-school department was given at the end of the half-year course. This test was just the same as the test which was administered at the same stage to the classes in the high school; furthermore the papers were graded by the

instructors in the high school, and the eighth-grade children succeeded in the tests fully as well as the high-school children had succeeded. There was a good deal of enthusiasm in the class for the work, and the general result upon the children of the whole experiment has been very gratifying. They have been willing to work, and they have shown enthusiasm about the progress which has interested their instructors as well as themselves. They have gone on in the high school this year with unabated success.

This year's eighth-grade class is doing from the first practically high-school mathematics, with the result that at the end of this year the present eighth grade will have, instead of half a year's mathematics to its credit, practically all of the first-year high-school work.

Such an adjustment as has been described in mathematics is not altogether satisfactory. The changes ought to be made farther down in the elementary course, and it is hoped that the work may proceed from this point in such fashion that in the sixth and seventh grades certain mathematical formulas that have always been given in algebra shall be gradually introduced. The use of co-ordinate paper and co-ordinate sections on the blackboard has long been common in the elementary course in mathematics. There is no reason why this should not be enlarged to the point of including a good deal of material that is ordinarily presented in geometry. In other words, the work in mathematics will gradually but certainly be worked over so as to articulate very much more intimately the work of the elementary school with that of the high school. There will ultimately be no break which has to be bridged over by the study of high-school mathematics in the eighth grade.

There are two eighth-grade subjects which are not fully dealt with in the preceding paragraphs. These are history and geography. A certain amount of history is commonly taught in the eighth grade. There is also a completion of the work in geography. If these two subjects are entirely omitted, the elementary course is likely to be incomplete, and if, on the other hand, they are carried up into the high school, they raise a number of questions which are not commonly understood by first-year teachers of the high school. Thus we find very few high-school classes which have any general geography. This practice, however, of completing geography in the elementary school is peculiar to the United States. If one visits European institutions one finds that geography is a respectable science which has its place in university classes and in the upper years of the secondary schools. There is no reason at all why we should not consider as part of our American readjustment the problem of putting into the high school a certain amount of geography. Indeed, such a change in the high-school course is advocated in many meetings of teachers of science. If the history taught in higher institutions is to be made intelligent, it is very clear that there ought to be some review of the geography which has been studied in the elementary school. At the present time the geography which finds its place in some

high-school courses is a form of physical geography, strictly related to the science of geology. That there should be some general earth science in the high school is recognized widely enough to command serious attention, and the suggestion which ought to be carried out in some form or other is that there be such a readjustment of the elementary-school geography that there shall be no loss to the individual pupil from the ultimate omission of the present eighth-grade course.

Again, with regard to history, the problem is one of general readjustment. At the present time the eighth grade in the university elementary school is carrying on the history and geography which have been for some years usual in this grade. The result is a program which is somewhat heavier than the program of students who are doing similar work in the first year of the high school. The heavy program is an incident of readjustment, however, and will probably be avoided in the future.

As a matter of administrative convenience, all of the readjustments which have been described above have been made without changing in any way the designations of the classes of pupils concerned. That is, up to this time the eighth grade has been continued as an elementary-school class. Children who have succeeded in doing the work in modern language, English, etc., have been passed into the second year of the high school, and there have been allowed to go forward with high-school work, taking advanced credits for the work which they did in the elementary school.

There is no final reason why the first year of the high school should be circumvented rather than that the eighth grade be abolished. Indeed, there are many reasons why it would be advantageous to omit the eighth grade and allow the children to begin their work with the regular course of the high school. It is planned for next year that the eighth grade shall be entirely omitted. The seventh-grade children will be promoted directly into the first year of the high school, and will carry on the work which is this year being done in the eighth grade, in the first-year class of the high school. This decision needs perhaps to be defended in detail. The purely local considerations are of no great importance. It is essential that the question be faced in some general form. In the effort to deal in a general way with the whole matter, considerations of the following type are of importance. Is the eighth grade in its organization and in its method of conduct of work more like the high-school class or more like the general elementary course? Do the students gain any social and personal advantages by being classified as high-school students, which they would miss if they continued to be members of the elementary school?

The considerations which led the officers of the university schools to decide on the abolition of the eighth grade are as follows: First of all, the general departmental type of work which has been carried on for years in the eighth grade is of the high-school type. Students have been brought into contact with special teachers for each of the subjects in the upper grades,

and this type of instruction seems to give the highest degree of efficiency. The student is mature enough so that he is not crippled by his lack of continuous contact with his instructor. Furthermore, this departmental type of organization makes it possible to defer in some degree to the special needs of the individual child. It is possible, in other words, to introduce some elective opportunity which will differentiate the course and adjust it somewhat more readily to the interests of the individual. Sometimes a child falls behind in a single subject. If the elementary type of organization continues, it is extremely difficult to carry him forward in his other subjects because of this single deficiency, whereas in the high school a deficiency in a single subject is not very serious for the general organization of the student's program. Apart, therefore, from the general advantages of election there is the possibility of adjusting the student's work in detail, and this adjustment is more readily carried on under the formula of high-school instruction than it is under the general formula of elementary organization. Indeed, the upper grades are even now, altho they remain in the elementary schools, taking on the freer form of organization which makes election possible.

Again there are many considerations which tend to attach the children of the upper years of the elementary school to the adolescent group as distinguished from the elementary group. A general social consciousness and a desire for the simpler forms of social life which are known in the high school and are cultivated by adolescent children, begin to appear in students of the eighth grade. There is no reason at all why such students should not, under careful supervision, be allowed to share in some of the larger liberties which are accorded to high-school students as distinguished from students in the elementary school. The interest that is aroused in the minds of these students who are just beginning to realize their social opportunities and obligations is also a distinct advantage in stimulating them to do better and more elaborate work. They can be thrown on their own responsibility with more definite consciousness on their own part and on the part of the teacher, that they are to be held responsible for their own conduct and for their social organization. They can be relied upon to organize more fully their home work. They can be appealed to in a variety of ways because of the classification which is accorded to them, whereas if they were continued in the elementary school they would feel on the whole more dependent than they do as members of the high-school community.

From the point of view of the instructorial organization also, it is doubtless advantageous for the students to be classified in the high school. They come in contact more frequently with men, and this is a distinct advantage, especially for the boys.

The question immediately arises whether this process of economy and condensation can legitimately be carried a step farther than it has been carried in the university elementary school.

In reply to the question thus raised, it may be said that the effort of the elementary school has not been in this case to work out to its final stages the whole experiment of readjustment. The effort which has attracted the attention and interest of the officers of the university schools up to this point is the effort to co-ordinate the work of the two schools. It is a mere accident that a single grade, rather than a grade and a half, has been eliminated as a result of this experiment. Perhaps the condensation of the course can go farther. It is the judgment of those who are in closest contact with this experiment that it is probably not desirable to attempt to reduce any further the time spent on the subjects discussed up to this point. If there is lack of economy in the high-school organization from this point on, that lack of economy can probably be corrected most advantageously by a fusion between the high school and the junior college similar to that which has been worked out between the elementary school and the high school. Whether or not the seventh grade should be classified with the high school or the elementary school is another question not to be confused with the question of economy. That detail of organization may or may not be worked out by reducing the elementary school to a six-year school. The work which is now done in the seventh grade will undoubtedly have to be done somewhere, and in much the same form in which it is now done. If that can be carried on better by high-school officers and under the classification of the students in the high school, there is certainly no objection to this new type of organization. If this change in the classification of the seventh grade were made, no such opportunity for further economy of time and energy on the part of pupils as that which has been recognized in the present readjustment of the university elementary school is likely to be discovered. From the point of view therefore of economy, the present experiment may be regarded as fairly closed. From the point of view of the possible reorganization of the elementary school, the present experiment does not aim to be at all definitive. It may be desirable to work over this organization much more completely than it is worked over at the present time, but any such administrative readjustment of the elementary school and the high school will in no wise affect the conclusion of the present experiment. One year has been saved. Whatever the classification, or whatever the type of organization ultimately adopted, this saving of a single year is a definite and final economy which will operate to the advantage of the student, whatever the form of organization thru which he passes.

The suggestion has been offered above that a similar economy can be effected in the high school. This is not the proper place in which to discuss this economy, but it cannot be repeated with too great emphasis that the failure to recognize the possibilities of economy usually grows out of the fact that two different institutions are organized under different managements and with different faculties. The one great virtue of this particular experiment is that it calls attention to the fact that a conference between teachers

who have to deal with the same children will very frequently bring out opportunities of economy that would be entirely lost sight of if these conferences were not held. It is also to be noted that the children feel, somewhat vaguely perhaps, this lack of economy. Indeed, it is frequently true that the lack of enthusiasm on the part of the children is the best possible indication that the school organization is defective. That teachers should be slow to discover the significance of these symptoms that appear in the listless children who refuse to be enthusiastic about reviews is simply another indication of the necessity of a careful and complete survey of the work of every instructor, giving him an opportunity to place his own individual task in the general light of all the educational activities which surround his own individual work. The eighth-grade teacher may have done his work conscientiously, but until he recognizes that it is his duty to carry the children forward as far as it is possible for them legitimately to go, he has not done his whole duty. This full duty may carry him into the domain of the high school. This should not deter him from the utmost efforts to economize the time of the pupils. The gravest menace to our school organization is that which grows out of the fact that all work of one type is terminated at the end of the eighth grade, and begins anew in an entirely different environment and with an entirely different set of officers in the first year of the high school. To transcend these limitations of institutional organization is one of the opportunities of the teacher who recognizes the fact that economy of the children's energy and time is more significant than any of the traditions of present-day school organization.

C. MOBILITY OF THE TEACHING POPULATION IN RELATION TO ECONOMY OF TIME

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With the great majority, school teaching is merely a means of earning a living; with a comparatively small minority it is a profession. Forced into the struggle for existence under the operation of powerful and impelling economic pressure, the ordinary American school teacher, who by the way is a woman, has found it an easy step from the schoolroom as a student into it as a teacher. That her motive has been mainly economic rather than professional is shown by the fact that the only occupations that surpass teaching in the number of women engaged in them are those that require less preparation. A consideration of the ethnic characteristics of American teachers, the social and economic stations from which they come, their age, experience, training, and mobility, shows that the men engaged in teaching have been subject to the same forces and pressures as the women.

The strength of these silent forces is shown by the testimony of seven thousand teachers selected at random from every section of the United

States. According to their statements, one man out of every five and one woman out of every four has one or both parents dead at the time he or she enters teaching; the annual income of their parents averages less than $800.00; while the families represented by these seven thousand teachers average seven in number. More than three-fourths of all American teachers are the sons and daughters of small farmers and small tradesmen. We are not amazed, therefore, when we discover that the majority of the newcomers have on the average had only four years of training beyond the eighth grade. We just then begin dimly to appreciate the limitations teaching labors under as a profession and to marvel at the results that have been achieved.

Every third man and every second woman engaged in teaching is under twenty-four years of age, 50 per cent of the entire teaching population have had four or less years' experience, and 25 per cent have had only one year's experience. At least half the teachers of this country are but little more than boys and girls. In these figures there is an implied indictment—not an indictment of the teachers and of the horde of young people who annually flock into the teaching profession, but an indictment of a public conscience that permits such an unwarranted condition to exist. Every trade, occupation, and profession must be constantly recruited by young people. It would be worse than worthless to inveigh against such an inevitable situation. But the strengths and limitations, the formative influence of these young people are determined not merely by their ancestry, their social class, and their economic station, but also by the motive they have at the beginning of their careers. Private information of an apparently thoroly reliable character leads me to conclude that in most cases the professional motive, a desire to consecrate their lives to service thru teaching, comes late as the result of successful experience, or early as the result of superior professional instruction—where some great personality has touched their lives and left its indelible impress upon them.

The situation is rendered even more complex when we consider the character and amount of training the novices have received. Three-fifths of the men and two-fifths of the women in the rural schools have had less than a high-school education. Only one rural teacher out of a hundred is a college graduate. One-half of the men and one-third of the women in towns, one-fifth of the men and one-sixth of the women in cities, have had less than a high-school education. It is clearly evident that the representatives of the different teaching levels present wide differences in intellectual attainment, which to some extent must account for differences in attitude and in general culture. Teachers of ambition and of sufficient native ability to rise are attracted cityward, where they have additional opportunities for enjoyment, recreation, and contact with people. Mere ability today seldom secures the coveted promotion; training is everywhere regarded as a fundamental prerequisite. Clearly the schools of small towns

and isolated districts are in many instances nothing but training stations for more populous communities. The problem of securing well-trained, skilled teachers increases in magnitude as we pass from the centers of population to homogeneous agricultural communities. The cry that the children of rural communities are entitled to as well-trained teachers and as competent instruction as the children in cities receive is a righteous cry. The tragedy of the American school situation is still the tragedy of the rural schools. It is there that we find many who have risked little in the way of personal investment, and they have gained little. Their little risk and little gain are checks upon the more rapid advance of the profession as a whole.

The extreme instability of the teaching population is shown in the failure of the recruits to remain in teaching. The median American teacher, irrespective of location and of position, has had less than four years of experience. This means that there are as many who have had less than four as there are who have had more than four years of experience. In round numbers it means that enough vacancies occur in the teaching force in four years to equal the total number of people engaged in teaching during any one of these four years. As there are about 600,000 teachers, this means that we have about 125,000 vacancies annually. All the normal schools, state and city, public and private, according to the reports of the commissioner of education, are turning out less than 20,000 graduates a year. If we add to the output of the normal schools, the graduates of departments and colleges of education, the number of trained recruits is still far short of the total number of vacancies.

One objective measure of the efficiency of the teacher is the value the world attaches to experience and training as expressed in terms of salary. Crude and unsatisfactory as this measure is, it is, nevertheless, indicative, where free competition prevails, of differences in teaching efficiency. The correlation between experience and salary is almost perfect for the first six years of the teacher's career. Put in more general terms this means that the world estimates that the maximum effect of experience has usually been attained in six years. Salary increases after five or six years of experience are more likely to be due to salary schedules, additional preparation, distinguished service, or some other consideration than to mere experience. The possibility of lifting the great body of workers in teaching to the plane of a true profession is thus restricted by the fact that more than 50 per cent leave teaching before they realize the cumulative effect of experience in teaching on efficiency.

While economic stresses and strains partly explain the great influx of untrained beginners, the respectability of teaching as a calling must also be offered as an explanation. People are not attracted to teaching because it offers an opportunity to become wealthy. School teachers, preachers, and honest statesmen must all die poor.

That the teaching force is being recruited from large families is an important sociological fact. That the transmission of our best culture is left by rather unconscious selection to a class of people who by training and intention are not yet eminently fitted for their work, and that those who enter teaching, even considering that they are the best of these prolific families, represent a group which does not perpetuate itself, are important facts for theorists and practitioners in education. Competent critics maintain that between 40 and 50 per cent of the sons of lawyers, ministers, physicians, and government officials pursue the occupations of their fathers. Only about 10 per cent of the sons of teachers ever become teachers.

Another measure of the mobility of the teaching population is found in the tendency of teachers to shift from level to level. Fifty per cent of the men, and 70 per cent of the women who go from country to town schools shift within the first five years of their teaching experience. Fifty per cent of the men who go from country to town, and from town to city schools spend less than three years in the country schools, and less than four years in town schools. Fifty-seven per cent of the ambitious women of this group teach less than two years, and 85 per cent less than four years in the country; 39 per cent less than two years, and 67 per cent less than four years in town. The group that starts in the country and advances directly to the city schools is a little more fortunate and perhaps a little more ambitious and able but no better trained than the group that tarries a while in town schools. Sixty per cent of those who pass directly from country to city schools make the transfer within the first two years of their experience. Two-thirds of those who go from town to city schools make the change within the first four years of their teaching life. In every instance these figures are an expression of the expectancy of the average teacher upon each of these levels. Most of the changes are made during the early years of the teacher's career.

Experience is partly responsible for these changes, but a closer examination of the facts shows that the shifts from level to level are directly related to training. Those who go from country to town average four years of training beyond the eighth grade, those who go from country to town and from town to city average five years, those who go from country to city directly average almost six years, while those who go from town to city average seven years of training.

This shifting means that the majority are left behind. These are not so well trained, have a little less ambition, or are held in restraint by insurmountable economic difficulties. Of course there are exceptions to this statement, but the difficulty of discovering teachers, superior in instruction, having professional insight and worthy ambition, increases in proportion to the isolation of the community. Even in the remotest communities there are some pedagogical oases; there are some teachers of rare wisdom and unusual instructional skill, but these are the exceptions. When we

remember that the places of those who are advanced to better-paying positions and of those who leave teaching entirely must be filled with young people who are practically untrained, we begin to appreciate the difficult problem of the supervisor. Supervision is necessary not only because of the enrichment of the curriculum, and a growing consciousness of new phases of method, but also because the teaching population is so mobile. A supervisor must constantly stimulate and reconstruct the point of view of those who remain behind, he must direct, train, often instruct, and always generate and cultivate those ideals among the newcomers that are necessary for success. These obligations and limitations of supervision are ever present.

A final measure of the mobility of the teaching force is shown in the rapidity with which teachers shift from position to position upon the different levels. Altho my figures are not sufficiently complete to be entirely accurate, I am led to conclude that three-fourths of the country schools have new teachers every year. Town and city teachers enjoy a greater permanency of position than country teachers, and yet in my opinion it is more important that good teachers stay for several years in a given country school than it is that good teachers stay in the same grade in town or city school, for the student population of the rural school is relatively the same year after year, while the pupils in a given grade in a town or city school shift grades every year or every half-year.

The same unsettled condition prevails all along the line. In Indiana, 34 per cent of the high-school teachers in the best high schools of the state are occupying their present positions for the first time, while but 16 per cent more are teaching their second year in the same place, making a total of 50 per cent who have not been employed in one place to exceed two years. One half of the high-school teachers in the high schools on the accredited list of the University of Illinois have been in their present places two years or less. Returns from 3,058 high-school teachers in nineteen central states show that high-school teachers in general have had a median experience in their present places of three years. Once in three years enough changes are made in the typical American high-school faculty to equal the total number of persons teaching in it.

These facts are enough to make us pause. High-school teachers are a select group. They have had nearly four more years of training than the ordinary American teacher. It is true that the training they have had has been of an academic character. The majority of them have not been instructed in the problems that lie distinctively within the field of education. Their first school is literally a practice school, for half of the high-school teachers got their initial experience in the high schools where they are now teaching.

The burden of responsibility falls heavily upon the practical school administrator when he recognizes that there are as many high-school

teachers who have taught a year or less as there are who have taught three years or more in their present places. It is barely an even wager that a high-school teacher will stay long enough in a given place to stamp his personality upon the school. Small wonder is it that many communities regard high-school teachers as an interesting type of cultured transients.

I am well aware that every sane superintendent would prefer to have his bad and indifferent teachers displaced by better ones; that he would like to be rid of those who have become stereotyped in their thinking and teaching; and that he would prefer to appoint gifted young people whom he may train in his own way. If mobility involved only this we should all welcome it. But it all too frequently happens, not always by any means, that those whom we would like to keep drift on, while the ones we would like to eliminate stay on forever. A certain amount of change is necessary to keep a school or a school system healthy. No change at all may be almost if not quite as bad as too much change.

The nomadic character of the teaching force leads to several bad results or forms of waste. One of these is seen in the lack of continuity in the methods employed in instructing in various branches. A high school employed a thoroly competent person to teach German by the direct method. When this teacher was beginning to establish herself and to create a wholesome atmosphere for this new type of language work, she was attracted to a larger place at an increased salary, and the superintendent was compelled to recommend the appointment of another beginner—one who could teach German only in the old-fashioned way.

In a certain small high school it was necessary to secure a new teacher of botany for each of three consecutive years. The first of these men was a systemist, the second an histologist, and the third a specialist on trees. For the first of these men the library was supplied with the books and the laboratory with the presses needed for the systematic classification of plant life. When the second man was appointed, these books and materials were put aside, new books bought, and $300.00 spent for additional microscopes. The third man, being practically untrained in microscopy and the systematic study of plants, recommended the purchase of additional material. It is a fact, of course, that the high school is not wholly to blame for this situation. So long as universities and colleges encourage and permit rather extensive specialization during the undergraduate career of their students, it will hardly be possible to secure teachers who are competent and willing to give courses in general science. A large high school could obviate this difficulty by breaking up the field and putting experts in charge of each division of it, but a small high school cannot do this.

Similar wastes in expenditure of time, energy, and money in each of the sciences appear when quantitative methods are superseded by qualitative methods of instruction. Thus it is that the indefiniteness and lack of

uniformity of methods of teaching; our willingness to be controlled by mere opinion rather than by established principles and modes of procedure; and the necessity of doing the expedient rather than the scientific thing, are partially explained by the itineracy of the teaching population.

One might suspect that the one class of the teaching population that possesses the greatest permanency is the supervisory force. And yet the facts from 768 towns and cities in a typical western state show that 70 per cent of the superintendents and principals have occupied their present positions for two years or less. The median length of service in a given city of the 1,292 superintendents listed in the *Educational Directory* of the Bureau of Education is only four years.

The office of the school superintendent, an American creation, was sanctioned by the desire of unifying a long and increasingly diversified school curriculum; of securing a rational system of grading and promotion that would secure the maximum degree of attention for all classes of children; and of overcoming the defects and handicaps of a changeable teachings force. But superintendents are almost as subject to change as any clas of teachers, and with the change there is usually a modification of function and a redistribution of responsibilities.

The ethics of the teaching business seems to lead many to think that it is discreditable to stay in one place more than two or three years at a time. Two forces or agencies are largely responsible for this opinion. One is the universal necessity and laudable desire of getting on in the world. The other is peculiar to teachers. It is a fact that they are compelled to spend long vacations without pay. During a large part of the year their attention is devoted to other pursuits. One who is compelled to divide his attention in order to insure a more respectable standard of living is not growing professionally. This very fact tends to put a low money value upon teachers, and it occasionally encourages them to engage in flirtations with new positions. That the struggle for existence may be ameliorated and that greater service may be performed, promotion should always be one of the rewards teaching offers to every ambitious candidate. But in addition to this, advancement to higher economic levels without change of position should be made the basis of a recognition of merit and of efficiency in teaching.

Thus far it has been shown that the changing teaching force is responsible for much of the chaos in educational practice. Every laboratory and every library show tracks of gross economic waste. The exploitation of nearly every kind of method human ingenuity can devise has not only resulted in loss within the school but has induced an alert public to question the character of the product of the school. It has also been shown that the multiplication of numbers in the teaching force, the extent to which young, inexperienced, and untrained persons are received into it, and the great difficulty we have in getting rid of inefficient teachers have been responsible

for imposing severe supervisory and administrative limitations that have at times hampered the freedom of the whole force.

The greatest handicap resulting from the mobility of the teaching population is our lack of professional solidarity. It is easier to force new material, new methods, and new devices upon an unstable than upon a stable population. As a class of people we are still largely an aggregation of units. This makes us very susceptible to all social demands. Our peculiar susceptibility to the propagandist, on the one hand, tends to create a dissatisfaction with much of the old material that should be intensified in meaning and expanded in application, and, on the other hand, it increases the necessity of multiplying administrative machinery.

An extensive investigation would be required to evaluate the losses described in this paper. Such an investigation would also describe the gains resulting from our shifting teaching population. Until such a comprehensive study is made we shall continue to trust to mere opinion for the remedies. One thing is sure—the kind of teachers we have and their transiency determine very largely the kind of teaching we get. In view of this we should spend a little less time in idealizing the teacher and her work and more time in attempting to secure an adequate description of the kind of people teaching is attracting.

D. THE ECONOMY OF TIME THRU TESTING THE COURSE OF STUDY AND TIME ALLOTMENT

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Time is the most important thing in the world. It is the one ever-present factor in all human accomplishment. Each thing that we do or make includes two elements—the time consumed, and the result obtained. In dealing with these two elements, the problems of education are fundamentally different from the problems of industry. In industry the tasks to be done are always definite tasks. In commerce, transportation, and manufacturing the problem centers on the amount of time necessary to sell goods, to carry people or things from one place to another, and to manufacture articles. The result to be obtained is a constant; the time required to do it is a variable.

In the field of education all this is reversed. We have a given amount of time, and our problem is to spend it as best we can. So far as elementary schooling is concerned, this available amount of time is about eight years. It begins at about the age of six, when the child becomes comparatively independent of his mother, and extends to about that of fourteen, when physical maturity approaches. These are biological, rather than educational, facts. During these years, going to school is the normal as well as the customary occupation of children.

The distinction indicated is the reason for the striking contrast between the signal progress made in economy of time in industry, and the modest achievements in economy of time in education. In industry the results to be achieved are known, definite, and constant, while time is a variable. In elementary education the time to be consumed is a constant, while the results to be achieved are the variables.

In apportioning the eight years of childhood among the subjects of the curriculum, educators have always asked two questions. These are: "How much time should we devote to the subject?" and, "What results ought we to expect to get?"

The proposition that I wish to present is that we shall secure economy of time in education only when we realize that the amount of time at our disposal is a constant, change our inquiry from the indefinite to the definite, and instead of asking, "What results might or ought we to get?" begin to ask, "What results are we getting?" This means calling a halt on the futile quest for standards to be evolved at round-table discussions and educational faculty debates, and substituting for them methods of measurement and standards of attainment which are the products of recorded experience.

If we can do that, we can lift our problem out of the field of speculation and into that of evidence. This involves recording and collating our available definite knowledge so as to answer three questions. The first of these is: "How much school time can we get into the eight available years of childhood?"

ADMINISTRATION OF SCHOOL TIME IN THE EIGHT ELEMENTARY SCHOOL YEARS

The greatest factor affecting the amount of available school time in the childhood years is regularity of attendance combined with the length of the school year. Most of our more advanced courses of study are based on the proposition that the elementary course consists of eight years of two hundred days each. The facts are that in general children do not attend regularly and in many states the school funds are so meager as to make a two-hundred-day school year impossible. The result is that children actually attend school for a much smaller number of days each year than the theoretical two hundred on which school men base their calculations.

If we compute the number of days the average child attends school in each of the forty-eight states, we shall find that in the one making the best record the average child would have to attend nearly ten and a half years to complete eight grades of two hundred days each, while in the state making the poorest showing, elementary schooling would stretch on the same basis over the astonishing period of twenty-five years. The meaning of these figures is plain. There is an immense gap between our common concept of the school year and the actual school year the children get. If we are to use economically the eight school years of childhood, we must

secure more regular attendance, increased school appropriations, and lengthened school years.

The next important factor in the administration of the school years is the rate of promotions. Here the fundamental principle is that the average progress of the child thru the grades varies inversely with the rate of promotions. Probably the average rate of promotions in American cities is not far from 80 per cent. That is, it is four-fifths of the ideal or normal rate of 100 per cent. Now if the children go forward on the average of four-fifths of the normal rate, they will take five-fourths of the normal amount of time to complete the work of the grades. Five-fourths of eight years is ten years, which is the time that it would take them on the average to complete the eight grades if all of them stayed to do so.

These facts mean that, of the eight years available for elementary education, we lose a considerable portion thru short school years, another large amount of time thru absence, and still another quantity of time because of low promotion rates. Worst of all, these three wasteful conditions are simultaneously present in most school systems.

ELIMINATION OF UNPROFITABLE SUBJECT-MATTER

Our second question is: "How can we improve the quality of the results secured in the time at our disposal?"

The answer is to be found in eliminating from our school work those portions that are of the least value. This necessitates testing the elements of the course of study to evaluate them in terms of their social usefulness. Again, my proposition is that we proceed by asking, "What results are we getting?" rather than, "What results might or should we get?"

Some three years ago, we undertook in the Division of Education of the Russell Sage Foundation two simple experiments in testing the social value of the subject-matter taught in our schools. The results were not conclusive, but they are most suggestive.

We had been asked to make tests of the arithmetic and geography taught in the schools of one of the large New England cities. Our experiments were confined to the work of the seventh grade. Turning our attention first to the arithmetic, we found that the work assigned for that grade was devoted mainly to measurements of space, time, content, weight, etc., and was divided into ten sections. We chose one example from each section, made from them an examination paper of ten questions, and submitted it to ten successful business and professional men in New York City, with the request that they take the examination. Those men were earning yearly salaries ranging from three to fifteen thousand dollars.

After some protest, all of them complied, and tried to answer the questions. The man who made the best record was Owen Lovejoy, secretary of the National Child Labor Committee, and he succeeded in getting a mark of 25 per cent. We then gave the same examination to our office

girl who was fifteen years old and had left the 8 A grade of the New York public school five months before. She got 75 per cent.

The clear lesson of this little experiment was that the schools were teaching arithmetic that had little application to the work of real life. Each man who took the examination earnestly explained that he had known all those different measures once, but that as he had never used them, they had slipped from memory. Two of the questions related to the purchase of paper in wholesale quantities, and of the men who took the examination one was the business manager of a great national magazine, while the other was the president of one of our foremost book publishing houses. Both of those men purchase tons of paper every year, and both failed on those two questions and protested that the terms used in them had been obsolete for half a century.

For testing the geography, a different method was tried. The work assigned by the course of study related in the main to Africa and South America. A tabulation of the amount of space devoted to the two countries by the textbook in use showed that Africa was given twice as much attention as South America. This suggests the query whether or not the Old World continent is more important to Americans than the New World continent. As a step toward answering it, figures were secured from the federal government showing the amount of commerce in exports and imports between our country and each of the continents. These figures show that the bulk of our commerce with South America is about eight times as much as it is with Africa.

As a second test, two press-clipping bureaus were asked to send us for the space of two months news articles and editorials dealing with either continent, and collected from publications printed in all parts of our country. The result was the collection of something like a bushel of clippings. When these were tabulated, it was found that those pertaining to South America were several times as numerous as those about Africa.

The result of this investigation was to show that there existed only the remotest relation between the amount of teaching devoted in that school system to the continents and their countries, the frequency with which the ordinary citizen finds references to them in current literature, and the amount of business that we, as a nation, do with them.

More recently we have conducted another test quite unrelated to those just described. It consisted of a study of the spelling vocabularies of two thousand business and personal letters. The results showed a striking discrepancy between the list of words used in the letters and those found in our school spelling-books. More than two-thirds of the words in the National Education Association spelling-lists did not appear even once in the tabulations of the words of these two thousand letters written by two thousand different people.

No claim of finality or completeness can be made for these obviously

inadequate tests of the social value of the arithmetic, geography, and spelling taught in our school systems. What has been presented is offered merely as illustrative of the sort of tests which might be made to evaluate the social utility of some parts of the subject-matter taught in our public schools.

DISTRIBUTION OF TIME AMONG THE DIFFERENT SUBJECTS

We have considered means for getting out of the years of childhood the greatest possible amount of school time, and we have considered methods for eliminating from subject-matter those portions that are of least value. Our third question is: "How can we use most efficiently the school time at our disposal?" As before, the proposition I present is that we proceed by the method of first finding out what results we are actually getting in existing school systems. This means that we must discover how much time is actually required to secure satisfactory results in the different school subjects.

Before we can solve this problem, we must find out what we mean by "satisfactory results." If we do not know what satisfactory results are, surely we cannot judge when we have reached them. If we have no definite goal, we cannot tell how long it will take to get there, or what sort of progress will most directly lead to it.

The keynote of the work of finding out what satisfactory results are lies in the change of our form of inquiry that has been suggested. When we have ceased asking, "What result can or might we get?" and have begun to ask, "What results are we getting?" we have put ourselves into a position where we can forge ahead. What we have done is to change our attitude from that of dogmatism to that of scientific inquiry. We have opened a way to investigations which will enable us to learn what results our different systems—good, moderate, and poor—are actually getting, and therefore what results may reasonably be expected. The results which are secured in the better systems, and which may reasonably be expected, are the "satisfactory results" for which we are seeking. Some systems never reach them. Some spend twice as much time as others to attain them.

For example, study of the penmanship of children in the final grades in different cities shows that at the end of eight years of schooling children in some cities are able to copy simple written matter at the rate of five words per minute, while in other cities children copy the same material in fully as high a quality of handwriting at the rate of twenty words per minute. Moreover, these discrepancies are found to exist between cities where the time devoted to the teaching of the subject is approximately the same. These are data from which satisfactory results may be distinguished from unsatisfactory ones. The new method of judging handwriting by measuring the work of the children is not so easy as the old method of doing it by discussing the methods of the teacher, but its results are far more definite.

In applying this method, we must keep uppermost in mind the fundamental principle that great economies are effected thru small savings. The change which effects a saving of thirty-five minutes a day results in economizing one year of school life out of the eight-grade course. The change which saves three and a half minutes per day means the saving of one school month during the course. It is the small changes that produce the big results.

Methods for measuring the work of school children have not been developed for all subjects, and it is questionable if they ever will be developed for some of them. Where they exist let us use them, and where they do not yet exist let us strive to develop them. Already measuring devices of such investigators as Rice, Thorndike, Stone, Courtis, and Hillegas are available in the fields of arithmetic, handwriting, spelling, and English composition. If there is no prospect that we shall soon be able to measure results in music, drawing, and the manual arts, let us turn our attention to those subjects on which work has already been done, and, in addition, to such others as geography, history, and grammar. At all events, let us bear steadfastly in mind that economy of time in education is to be reached thru measuring the results that we are getting, rather than thru arguing about the methods that we might be using.

The methods proposed for coping with the problems of the economy of time in education are not easy methods. They depend on analytic scrutiny, exact measuring, careful recording, and judgment based on observed fact. The problems are those of time spent, quality of result, and quantity of result. Their solution depends on three things: first, the economical administration of the available time of childhood; second, the elimination of the least useful portions of the subject-matter taught; third, securing of the largest possible returns for the children from each period of time devoted to each subject.

If these methods are laborious, their results are amply sufficient to repay all the labor involved. When we put them into practice, teachers will have an opportunity such as they have always dreamed of, and which they have never been able to secure. The truly economical administration of the available time of childhood will result in the teachers working in school systems in which all the children attend schools, the school year is of ample length, the attendance regular, and the progress of the children thru the grades uninterrupted save by exceptional circumstances. The elimination of the less useful portions of the subject-matter taught will result in having a course of study shorn of archaic features. Basing decisions as to what constitutes "satisfactory results" on scientific standards founded on the recorded achievements of other teachers will render available for the help of each the experience of all.

TOPIC: IMPROVING SCHOOL SYSTEMS BY SCIENTIFIC MANAGEMENT

A. UNDERLYING PRINCIPLES

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In 1902, I had the honor of addressing this association on the subject, "Obstacles to Educational Progress." That address was intended to direct your attention to the fact that progress in education depends, first, on the periodic organization of educational doctrine or theory by those whose business it is to have a well-defined educational theory—superintendents of schools, among others; and second, on the perennial organization or collective appraisal of educational experience (results) by those whose business it is to know just what results are achieved—superintendents of schools, among others. I maintained, at that time, that neither the organization of educational theory nor the organization of educational experience was attempted by any of us "educators" in any comprehensive or satisfactory fashion; that every superintendent was a law unto himself in these matters; and that because individual opinion and unappraised individual experience determined educational procedure, and these could be successfully ignored or opposed by other superintendents or by laymen, the guidance we needed for steady progress in education was lacking.

These propositions were apparently assented to. At least, a Committee of Nine (afterward increased to eleven) was appointed toward the close of the session of 1902, the duties of which were to formulate the aims or principles underlying the contemporary provision for and tendencies in American education. Tho not a member of that committee during the first year of its existence, I ultimately became its chairman. The committee set about its task seriously, but it failed to secure from the money-appropriating officers of the National Education Association the funds needed for its purposes, and, after a year or two of more or less ineffectual effort, it passed out of existence, "unwept, unhonored, and unsung."

Nevertheless, the propositions put before you at that time are still sound. Indeed, the subject of this afternoon's session shows that we are now asking the same question we asked then, only more insistently: "Ubi-nam gentium sumus?" or, with apologies to Cicero, "Where are we at?" What progress we have made toward getting the answer to this question consists chiefly in a more complete and more frank recognition that the question imperatively demands an answer; that the more imperfectly and provisionally we are now prepared to answer it, the more necessity there is for attacking it persistently, until the margin between professional or technical information and mere opinion is progressively increased; until we can show any thoughtful person just what we are aiming at and what we are achieving.

The reason why laymen in education, school-board members, or newspaper men, for example, often find it easy today, as they found it easy in 1902, to advocate successfully questionable educational undertakings, or to oppose with equal success promising undertakings or fairly well-established practices, is that the margin between technical information and lay opinion is still so narrow. The only way to combat successfully mistaken common-sense as applied to educational affairs is to meet it with uncommon-sense in the same field—with technical information the validity of which is indisputable. Hence we now seek to confirm or refute educational opinion by the measured results of educational experience. We have come to see clearly that unless the validity of educational opinion is established by verifiable data which any technically informed person can appeal to, we are practically helpless. As in engineering or in medicine, our practical procedure can inspire confidence only so far as it rests on objectively established truth. The progress we have made since 1902 can be stated in another way. We are no longer disputing whether education has a scientific basis; we are trying to find that basis.

This last statement summarizes the great change that has taken place during the last ten years in the attitude of progressive workers in the field of education thruout the world. It is a promising change. Authoritative or dogmatic control in education is going the way of mere authority and dogma in human affairs generally. They cannot survive unless they can experimentally establish their validity as instruments for promoting the material and spiritual welfare of mankind. We must face the fact, however, that our promising contemporary investigations and experiments have not yet reached the stage of establishing objective validity for educational procedure to any considerable extent. Exact measurement in education, the necessary basis of a science of education, is only in its beginnings; but those beginnings are real. If, in spite of what I have just said, I have accepted the task of presenting for your consideration principles underlying what the program calls "Improving School Systems by Scientific Management," it will be understood, I trust, that I cherish no illusions concerning the ultimate worth of my present endeavor.

I know that the principles I am about to offer for your consideration are not all-embracing; and I am far from claiming that they possess scientific validity. Nor do I claim that they are new. Nevertheless I do not hesitate to offer them, so far as they go, for what they are worth. They are scientific so far as they represent a serious attempt at generalization from contemporary procedure in progressive school systems; and hence they are at least definite hypotheses, the validity or the falsity of which can be established by carefully collected and well-organized future experience.

The efficient management of a public-school system depends on the following conditions:

1. A clear conception on the part of all concerned with its work of the purposes for which the school system exists—of its aims.

2. A clear conception of the difference between the functions of the board of education and those of its staff, and actual differentiation between them in practice; i.e., centralization of authority and responsibility for: (A) effective lay control in the board; (B) business and professional management in the board's staff of employees.

3. Complete accountability of the board to the people for the work done and the money expended under its direction.

4. A general manager and executive for the whole enterprise appointed by the board, whose authority is commensurate with his responsibility—the city superintendent of schools.

5. A competent staff of employees for the educational activities and for the business affairs of the school system directly responsible to the general manager.

6. Complete accountability of the general manager and thru him of the staff to the board of education for the proper performance of the duties with which they are charged.

7. Habitual and well-organized self-examination within the school system; including adequate objective appraisal by the staff of results achieved, and well-conducted experiments to confirm or refute educational opinion within and without the school system.

8. Co-operation under leadership thruout the school system itself, and of the school system and the community.

These conditions I now intend to discuss in order, but limitations of time and space obviously permit only brief consideration of any of them. My discussion is limited also to the educational aspects of a school system, both for the reason just stated, and because the conditions of efficient business management in school affairs will be discussed, I understand, by others.

AIMS

To say that an efficient public-school system must be based on definite aims is to state an obvious truth. Yet few persons conversant with school management will assert that the actual formulation of such aims and the clear conception of them that such formulation necessitates are common among superintendents and school officials. Accordingly I venture such a formulation. It is based on the procedure of progressive school systems thruout the country.

The aims of a public-school system in a democratic country like ours grow naturally out of our conception of the meaning of public education. That conception can be stated, in general terms, in a few paragraphs.

Public education is a social force. As such, it aims at social welfare and betterment. It is also the means of individual development—the fullest development (self-realization) of which each individual is capable.

As a social force, public education aims to preserve, improve, and transmit the resources of society, and to develop in each individual general and specific social efficiency. General social efficiency means social intelligence and the power to deal effectively with social problems. Specific social efficiency means vocational efficiency, or efficiency in a particular calling.

As a means of individual development, public education takes account of the nature of individuals and of the circumstances of their lives. It

supplies the means of promoting their normal development as socialized human beings. It aims to arouse and develop all the worthy interests and corresponding powers of each individual, so far as his ability and stage of development permit, in order that his life as an individual may be as full and rich as possible, and that no artificial obstacles may stand in the way of his spiritual and material advancement. Hence:

1. Public education should train efficient citizens—men and women who recognize and appreciate the common interests of our democratic society and are able to promote their progressive development. These interests are spiritual, intellectual, moral, æsthetic, hygienic, economic, and civic. They are also religious, but since experience has shown that religious interests are inseparable from ecclesiastical interests, and since society has an institution for promoting both at once—the church—a democratic society like ours wisely delegates the preservation and transmission of religious interests to the church.

2. Public education should strive gradually to emancipate each pupil from external restraint and guidance, and thus render him self-directing—intellectually, morally, and physically stable; alert, vigorous, and active. Together with the instruction public education offers, it should, therefore, insist thruout on discipline that is wise, kindly, and firm, including appropriate punishment when needed—a discipline that insists on progressive conformity of conduct to insight, including habits of steady application and reasonable achievement.

3. Public education should endeavor to prepare each pupil to make the best use of his leisure as well as of his working hours. Satisfactory diversions and good recreative habits are important for both the individual and society. Without disparaging harmless diversions and amusements, public education should, therefore, strive to develop an appreciation of and a demand for the serious pleasures our civilization affords.

4. Public education should strive to render each pupil economically intelligent and efficient. It should direct each pupil's attention to a vocation to which he may reasonably aspire; that is, every pupil should be led gradually to realize that a suitable vocation, accessible to him and adapted to him, is indispensable to a useful and happy life. As he approaches the end of his school career, whatever his age may be, he should come to see that his vocation will be not only the means of satisfying his personal wants and ambitions, but because it is the chief means of establishing significant relations between himself and his fellow-men, it is also the source of such public service as he is capable of and may be called upon to render. Public education should, therefore, provide for the development of vocational purposes based on vocational enlightenment (vocational guidance); and it should offer each pupil appropriate training for the vocation of his choice.

Public-school systems must therefore be so constituted as to provide adequately: first, the means of appropriate, and, so far as possible, complete

general development—self-discovery and self-realization, and preparation for general social service for every pupil; and second, various kinds of vocational training adapted to the needs, tastes, and future callings of all pupils who pass at once from school to their life-work, and, for those who wish to improve themselves after they have gone to work, preparation for specific social service, i.e., for usefulness in a vocation.

They must therefore provide:

1. The elements of general culture, comprising an insight into, appreciation of, and power to deal with, the recorded ideals and experience of the race; and all worthy interests of contemporary life, so far as they can be rendered interesting, intelligible, and accessible to children and youth of school age; that is to say, the school program, the program of studies, must cover:

a) The school arts—reading, writing, and arithmetic.
b) Language and literature (modern and ancient).
c) History, government, and economics.
d) Art (pictorial and plastic art, constructive art, and music).
e) Mathematics.
f) Natural science.
g) Manual arts and domestic arts.
h) Physical education, including physical training and athletics.
i) Vocational guidance.

For these studies, we must have schools of different types, as follows:

(1) Kindergartens.

(2) Elementary schools, with differentiated upper grades, and well articulated with the high school.

(3) High schools, having as wide a range of electives, administered under wise guidance, as possible.

2. Vocational training, training for specific social service, at the upper end of the elementary school, and in industrial and commercial schools, whether called secondary schools or not, as follows:

a) Day vocational schools for normal pupils over fourteen years of age, whether they have completed an eight years' elementary-school course or not, and who will not go to a high school.

b) Day co-operative and continuation schools (vocational) for pupils fourteen to eighteen years of age who cannot afford or will not take the time to attend a day vocational school.

c) Evening continuation schools, vocational and non-vocational, for pupils over eighteen years of age who are at work during the daytime.

d) Vocational high schools—vocational schools of secondary grade.

1) High schools of commerce.
2) High schools of practical arts (technical high schools).
3) Agricultural high schools.
4) Or well-organized separate departments of (1), (2), and (3) for vocational instruction in general high schools.

But the American people are not satisfied with schools for normal children only. They acknowledge their obligation to do all that can be

done for exceptional children as well; hence they provide also schools or classes for:

a) Cripples.
b) Anemic and tubercular children.
c) Incorrigibles and truants.
d) Blind children.
e) Deaf children.
f) Mentally defective children.

The extent to which a school system provides for the realization of these aims is a measure of its efficiency so far as the educational opportunities it affords are concerned, i.e., is a measure of the adequacy of educational opportunities as compared with educational needs.

CENTRALIZATION OF AUTHORITY AND RESPONSIBILITY FOR EFFECTIVE LAY CONTROL IN BOARDS OF EDUCATION

This depends on small boards—boards having less than ten members. The tendency toward small boards is now so well established and the results following this tendency give such general satisfaction that this condition of efficient management needs no discussion. The question whether such boards should be paid or unpaid is, however, still agitated, and sometimes vigorously. Considering our limited experience with paid boards having clearly defined functions differentiated by law or otherwise from the functions of the staff, this question must be regarded as unsettled. Nevertheless the well-known theoretical objections that paid boards, i.e., boards whose members are paid to give all their time to school-board service, would inevitably confuse lay control with professional and executive management; that such boards, whether the salaries are large or small, would attract undesirable members and make it difficult if not impossible to secure the most desirable; and finally, that it is neither necessary nor desirable that board members should give their entire time to the service, even in the largest cities—these objections to paid boards are cogent, their validity is almost self-evident, and justify the widespread and strong disinclination to experiment with paid boards.[1]

Efficient management implies a clear conception thruout the system of the nature, scope, and limits of the functions of each branch of the service. Hence a clear statement of the functions of the board should be found in the education law, including the charter; and thorogoing study of these functions by board members is imperative. These functions are: (*a*) The appointment of a general manager, and thru him of a competent staff of employees for the business affairs, and for the educational affairs of the school system. (Inasmuch as the school system exists for educational purposes, the general manager of the whole enterprise should be an educator;

[1] "The Board will, in the long run, become of the same type as the persons who press for membership in it. There has never been any difficulty in getting the best men and women for this service. The difficulties have come from the failure of the appointing power to look for the best." Brief of the Public Education Association on the Education chapter of the proposed charter for the city of New York August 14, 1911.

and because the city superintendent should be the responsible head of the educational activities of the school system, the general manager should be the city superintendent of schools.) (*b*) Deciding general policies by requiring, hearing, and criticizing reports from its staff of employees concerning business and educational aims, means, methods, and results. (*c*) Delegating all executive functions whether business or educational to the staff of employees. Such delegation of functions makes standing subcommittees of the board unnecessary, and they should not exist. To say nothing of other objections to standing committees of the board, such as confusion or conflict of the duties assigned to them, and dispersion of the board's responsibilities, when the board assigns to a subcommittee or to itself the performance of technical or executive functions, it usually attempts the impossible because neither the board nor its subcommittee possesses either the qualifications or the time required. Moreover, while attempting the impossible, the board also loses sight of the important function just referred to—the duty of deciding general policies, and seeing that its deliberate judgment on those policies are effectively carried out. The performance of this duty demands all the time and requires all the practical wisdom a board can bring to bear on its task. Together with complete accountability to the people, it constitutes the supreme duty of the board as the representative of the people in the management of their educational affairs. The staff, under the direction of the superintendent, as co-ordinator and general manager of the board's affairs, and not the board itself or the subcommittees of the board, has the time and should have the special qualifications for formulating policies, investigating proposals, carrying out the decisions reached by the board, and reporting on the results achieved. That is what the staff is for. (*d*) Complete accountability to the people in respect to both the financial affairs and the educational affairs of the school system. Financial accountability covers both budget estimates and actual expenditures for each activity authorized by the board. Careful making of budget estimates based on recorded, incontestable, and well-organized data (statistics of past experience and contemporary conditions), and equally carefully prepared and classified exhibits of expenditures are imperative. Nothing is more subversive of efficient management than inadequate funds and insufficient control of the funds required for the work to be done. Both sufficient money and the control of it when secured depend on a convincing statement of real needs and of actual necessary expenditures. There is no other way to minimize the inevitable and well-nigh universal difficulty of securing the money needed for schools.

Accountability in respect to the educational affairs of the school system covers: (1) adequate provision for the educational needs of the community, as outlined near the beginning of this paper; and (2) the success actually and progressively achieved by the school system in educating all the children of the city in accordance with their capacities and needs. This success is

measured by its ability to hold all children exclusive of the mentally defective in elementary schools, vocational schools, and high schools, beyond the upper limit of the compulsory attendance age; the proportion of such pupils of normal age completing or failing to complete a course of study in these schools; the efficiency of the compulsory attendance service in preventing as well as curing irregularity of attendance and truancy; and its success in discovering, segregating, grading, and caring for mentally defective children of school age.

Accountability, both financial and educational, cannot be satisfactorily discharged without brief, compact, adequate, and perfectly lucid statistical summaries of the facts reported on. That such statistical summaries are worthless unless they are truthful and easily interpreted not only by members of the board but also by any intelligent person who considers them seriously goes without saying. That school statistics now often conceal rather than reveal the facts is a serious handicap to efficient educational management. That school statistics, like other statistics, may be misused by designing persons is also true. Nevertheless accurate and readily interpretable school statistics constitute one of the most valuable means of self-examination a school system can use; and self-examination with a view to learning and setting forth the truth is a very important step toward the progressive improvement of school systems, i.e., toward efficient management.

Finally, effective lay control by the board of education requires the complete independence of the board of education from the city government. The idea that boards of education are now not local but state boards, altho elected by local voters or appointed by local officials, and listed among local departments, is not new. It seems new to some persons, however, so new that in the city of New York it has recently been called preposterous. Yet the plain intent of the law in New York as in other states is to separate school affairs from all other municipal affairs. Numerous examples could be cited, but two or three will suffice. No less a person than the present mayor of the city of New York when justice of the Supreme Court rendered the following decision:

> It [the Brooklyn board of education] is not a part of the corporation of the city of Brooklyn, but is itself a local school corporation, like every board of school district trustees thruout the state, and is like every such board an integral part of the general school system of the state. It is a state and not a city agency, doing state and not city work and functions. Education is not city, village, country, or town business. It is a matter belonging to the state government. From its comprehensive foundation by Chapter 75, of the laws of 1795, down to the recent codification of our school laws, our state system of education has remained a consistent whole.

And the Court of Appeals of the same state has declared:

> All this results from the settled policy of the state from an early date to divorce the business of public education from all other municipal interest or business, and to take charge of it as a peculiar and separate function thru agents of its own selection, and immediately subject and responsive to its own control.

The same principle is conspicuous in the new school code of Pennsylvania. Again, the boards of education in St. Louis and Kansas City are not subject to their respective city governments; they are independent tax-assessing and -spending bodies.

The intention of the people in some states as regards the independence of the public-school system in relation to the city government is therefore plain; and a strong tendency in that direction is in evidence thruout the country. What is too often lacking is clear knowledge of this intention and a just appreciation of its significance on the part of boards of education, and, on occasion, lack of courage and persistent effort on the part of boards of education to see that this intention is carried out. Until this intention is universally recognized and carried into effect, i.e., until boards of education are everywhere independent of the city hall, school systems cannot expect to escape the baneful influence of the politically organized and controlled forces of city governments—forces directed by city boards or by persons whose chief real interests lie elsewhere than in the education of the children. Complete independence of boards of education from city governments is accordingly a fundamental condition of effective lay control of public-school systems by such boards, and hence of efficient management.

CENTRALIZATION OF AUTHORITY AND RESPONSIBILITY FOR BUSINESS AND PROFESSIONAL MANAGEMENT IN THE STAFF

Efficient management of the school system requires, as we have seen, the centralization of responsibility for all executive details, including professional management, in the staff, with the city superintendent at the head as general manager. Such executive and professional management requires:

Constant, alert, and courageous endeavor to secure for the people the education their children should have, i.e., *to secure the schools needed for the appropriate education of all the children.*

Adequate and appropriate means of determining the qualifications of well-trained and otherwise satisfactory workers for the educational staff, and for the business staff of the school system.

The appointment of duly qualified members of the staff thru the general manager, and their assignment to duty, including transfers, by him. No preference should be shown for home candidates as such in any appointments.

Promoting the progressive usefulness of the staff, and insuring their tenure of office during efficiency and good behavior, and removing unsatisfactory members from the service.

Appropriate promotion of members of the staff to posts of increased responsibility and emolument. But such appointments should not be limited to persons already members of the staff.

Retiring satisfactory members of the staff when they become disabled or superannuated, with suitable retiring allowances.

Organizing the staff for the performance of the several functions to be discharged.

Supervising the performance of these functions, and reporting thereon to the board.

Promoting co-operation under leadership thruout the school system itself, as well as promoting co-operation of the school system with the community.

Hence, as general manager of the board's affairs, it is the duty of the city superintendent, with the help of the staff: (*a*) To show the board of education what schools and how many of each kind are required and where they should be built to realize the educational aims for which the school system exists. The people want good schools, but not being technically conversant with the problems involved cannot themselves plan the details of such schools; nor do they know what material equipment—buildings, grounds, and teaching apparatus—the schools require, nor where such schools should be located. (*b*) To secure a properly qualified supervisory force for the organization, administration, and supervision of the schools. (*c*) To secure an efficient teaching corps for all the schools; and to recommend the salaries to be paid them, together with the conditions for tenure, promotion, and retirement with or without retiring allowances. (*d*) To formulate courses of study for the several schools, together with suggestions as to methods of teaching. (*e*) To select textbooks, apparatus, and all other teaching resources. (*f*) To define standards of achievement as to quality and quantity of work done by pupils in harmony with varying individual and local needs thruout the school system. (*g*) To define similar standards of achievement for the work done by teachers and supervisory officers. (*h*) To carry on habitual, well-organized self-examination within the school system, by means of (1) carefully collected and properly organized educational statistics showing progressively what educational results are actually achieved in every branch of the service; (2) investigation involving experimental verification or refutation of educational opinion within and without the school system, or at least a search for the method of such objective appraisal of educational opinion and of the results achieved; and (3) a system of office records for the educational affairs of the school system that can be made to yield to the staff, to the board, and to the public, truthful, clear, prompt, and adequate information on any aspect of the work—to yield this information at any time, but especially in the annual report of the superintendent and the board. (*i*) To secure a staff of properly qualified officers and employees for the business affairs of the school system, i.e., a staff to purchase sites, build buildings, and equip them and care for them properly when built; to purchase all kinds of supplies and to secure their prompt distribution to the schools, and an adequate and properly qualified office force. (*j*) To provide a system of records and accounts for the business affairs of the school system as for its educational affairs.

Time will not permit the discussion of these factors of efficient management by the staff. But I must deal briefly with at least two of them. Let us first consider habitual self-examination. This means a study of their functions, and of their performances by the board and by the staff.

Boards, on the whole, are not much given to this form of self-examination. It should be cultivated. Without it we shall continue to have boards, whether large or small, who have no conception of what

their functions are, or what is even worse, false conceptions of those functions. If boards are without adequate conceptions of their duties, we cannot expect them to develop the means and methods of satisfying themselves and the public that these functions are adequately discharged. If they have false conceptions of their functions, confusion in school affairs, and mismanagement, or inefficient management, are inevitable. It is, therefore, their first duty to study their functions, in order to attain clear conceptions of what those functions really are; next to endeavor unceasingly to develop the methods of assuring themselves that their proper functions are satisfactorily discharged; and finally, to show the public that they are both thoroly alive to their real duties and that these duties are performed.

The only force that can bring about this indispensable factor of efficient management is informed, aroused, and insistent public opinion. *This public opinion it is the duty and privilege of the superintendents to cultivate by every means in their power.* Neglect of this duty by superintendents is one of the most serious violations of efficient management. To discharge this duty requires a professional consciousness, that springs from the possession of professional resources, and the sense of responsibility which is its natural concomitant—a professional consciousness and a sense of responsibility akin to those felt by physicians, lawyers, and engineers, in their spheres of activity. That it also requires tact and courage goes without saying.

Habitual and well-organized self-examination within the staff requires a perennial study of their functions and performances by the members of the staff under the leadership of the superintendent. This means the attainment of a clear and adequate conception, on the part of the supervisory staff—the city superintendent, directors, and principals—of what constructive supervision really means; i.e., a serious attempt to develop a potentially productive theory of supervision which the supervisory force works out for itself, and never-ending endeavor to find appropriate, and so far as possible, objective methods of testing the results of supervision in practice. It means similar continuous study of their several functions on the part of the rank and file of the staff under the leadership of their immediate superiors; progressive cultivation of willingness on the part of all concerned to look upon the results of their work in the light of objective appraisal of those results, as measured by all the means of measuring educational results now available and other means as fast as they become available; and especially, unshrinking facing of the results of such measurement whatever they are.

Unless and until such self-examination within the staff becomes the rule in city-school systems thruout the country, we shall never have the professional resources and the professional consciousness born of them on which professional leadership and working efficiency, i.e., efficient management and satisfactory results, in the last analysis, depend. Until

such self-examination becomes habitual, school systems will certainly resort to outside agencies to tell them how they stand. If the outside agency is a good one, the results to the school system may be correspondingly good. The danger is, however, that because the public has not yet learned to discriminate between educational specialists and plausible charlatans, the public may choose unwisely, and the school system may thus become the prey of the self-seeker and the charlatan. The duty of the superintendents in relation to this fundamental element of efficient management is plain.

The second condition of efficient management to which I must refer briefly, at least, is co-operation under leadership thruout the staff and of the staff with the community. I have already pointed out that as an executive and administrator the authority of the superintendent must be completely commensurate with his responsibilities. To exercise this authority wisely, to safeguard the initiative and secure the co-operation of his staff, he must know how to delegate authority and responsibility to his subordinates and to give them the same freedom within their spheres of activity that he possesses or should possess in his own. Unfortunately, in school management, we are sometimes, at present, confronted with the anomalous situation of a superintendent who accepts the heavy responsibilities of his office without any guaranty, either expressed or implied, that he shall also possess the authority that should accompany them. The consequence is that he becomes the mere instrument, and sometimes simply the hireling of the board. Under such circumstances he has, of course, no authority to delegate. Efficient management, however, requires that he shall have. Delegation of authority by the superintendent; and accountability and freedom of action among his subordinates is the means of securing administrative co-operation in the staff.

For efficient management co-operation is even more important in the field of supervision. Administrative control will keep the school going, but it will not keep the schools going so as to guarantee results of high value. To secure such results efficient and expert supervision is indispensable.

In the great school systems, the superintendent cannot himself participate in the details of supervision, as he can and should in the smaller systems. In the great school systems, he is too remote from those details to supply the personal touch that actual supervision requires. In either case, however, he can best fulfill his supervisory functions with the aid of an officially constituted supervisory council. He should have two such councils when the system is large—one for business affairs, and one for educational affairs. This council should consist of representatives of his entire staff, and should be the official channel of communication between the superintendent and the staff. This channel should be kept open and in use, and to it should be committed all questions of policy and procedure—questions dealing with the aims, means, methods, and results of the work of the

school system, and no measures dealing with these matters should be adopted without the approval of the council, after full deliberation. Such a council could make effective the combined wisdom of the entire staff, and this is essential to efficient management. It should invite criticisms and suggestions; and it would obtain them chiefly from those whose criticisms and suggestions are most valuable, namely the thoughtful members of the staff. The staff should understand that criticisms and suggestions are expected from them; and the council should insure careful consideration of them when they are made.

Such a council would thus vitalize all the work. It would tend to eliminate the shams; it would do away with passive or restive compliance with orders from above; and it would substitute initiative and co-operation for bureaucratic control; and *initiative and co-operation under leadership is the secret of good schools and school systems.*

We have found the principles of efficient management of a school system to be:

A clear conception of the purposes for which the school system exists—the work it has to do.

An equally clear conception on the part of all concerned with this work of the nature, scope, and limits of each branch of the service, i.e., of the board, and the staff.

Centralization of authority and responsibility for effective lay control in the board; and for professional and business management in the staff.

Complete accountability of the staff to the board and of the board to the people.

Habitual, well-organized self-examination to determine the results actually achieved, including experimental verification or refutation of educational opinion within and without the school system.

A system of clear, adequate, incontestable, and accessible records of the educational results progressively achieved, for the information of the staff, the board, and the public.

A similar system of financial records or accounts for the same purpose.

Co-operation thruout the school system, under the leadership of the superintendent and the supervisory staff, in both the professional and the business affairs; co-operation of these branches of the service with each other and with the teachers; and co-operation of the community with the school system.

B. THE APPLICATION OF THE PRINCIPLES OF SCIENTIFIC MANAGEMENT

F. E. SPAULDING, SUPERINTENDENT OF NEWTON SCHOOLS, NEWTONVILLE, MASS.

School systems are managed and may be improved both from without and from within. Fundamental principles to be observed in improving both their external and their internal management have been outlined for us by Professor Hanus. The observance of such principles of external organization, support, and control as Professor Hanus lays down makes theoretically possible the unhampered practice of scientific management within the school system. It is to this phase of the subject, the

improvement of the school system from within, that I now invite your attention.

As we recall the familiar stock examples of scientific management that come to us from the material industries—such as the moving of pig iron, the laying of brick, and the cutting of metals—as we recall the multitude of stop watch observations and experiments, the innumerable, accurate measurements and comparisons of processes and results, out of which after many years these examples have grown, we may be pardoned if we feel a momentary doubt of the applicability to the educational industry of any management worthy to be characterized as scientific. But when we learn of the marvelous results achieved in some material industries thru the elimination of waste motions that were not detectable by the unaided eye and the stop watch, but which yielded to analysis made possible only thru motion pictures, we are somewhat reassured; for we are impressed with the fact that great improvements, if not perfect efficiency, may arise from observations and measurements that are relatively crude. Scientific management is a method, characterized by its spirit quite as much as by its accuracy.

The essentials of this method are:

1. The measurement and comparison of comparable results.

2. The analysis and comparison of the conditions under which given results are secured—especially of the means and time employed in securing given results.

3. The consistent adoption and use of those means that justify themselves most fully by their results, abandoning those that fail so to justify themselves. The progressive improvement of a school system demands that these essentials of scientific management be applied incessantly.

Let us waste no time over the obvious but fruitless objection that the ultimate and real products of a school system—those products that are registered in the minds and hearts of the children that go out from the schools—are immeasurable, and hence incomparable. There are mediate products in abundance that are measurable—products that every school system seeks to turn out because of the well-founded knowledge or belief that thru these the desired ultimate products are achieved. Neither will we take any time to enumerate exhaustively those school products that can be measured and that are worth measuring; to describe suitable units of measurement, and their application; and to enlarge upon the improvements that may be effected in any school system thru such measurements and the procedure that the results suggest.

Instead of abstract discussion—school systems are not improved by scholastic treatment—I want to bring before you a few concrete samples of a large amount of data that is being constantly secured and used in the actual process of applying principles of scientific management in the effort to improve one little school system; to suggest something of the significance,

the value, and the use of these data; and to tell of some definite results of their use achieved and anticipated.

I know of no single adequate measure of the efficiency of a school, either absolute or relative. I know of no combination of measures by which the exact superiority of one school over another can be expressed in a single term. Several very important products or results of schools' work can be definitely measured, however; the efficiency of schools in these respects can be definitely compared; the conditions, the processes, and means which brought about these measurable results can be studied, and, so far as lies in the power of the school, those conditions, processes, and means which show the largest measure of justification in results can be adopted. I refer to such results as the percentage of children of each year of age in the school district that the school enrolls; the average number of days' attendance secured annually from each child; the average length of time required for each child to do a given definite unit of work; the percentage of children of each age who are allowed to complete their schooling, with the average educational equipment of each; the percentage of children who are inspired to continue their education in higher schools; and the quality of the education that the school affords. This last, the quality of education afforded, is as important as it is difficult to measure. Definite examinations of pupils' knowledge of subjects are not without value, but are open to many serious and well-founded objections.

With conditions as they are in Newton, we have, not a perfect nor a complete, but an exceedingly valuable comparative measure of the quality of education afforded by the several grammar schools. This measure is found in the qualitative success—that is in the standing in subjects studied—of the pupils sent by the grammar schools to the high schools. It has long been a dominant aim of every Newton grammar school to send the largest possible percentage of its pupils into some of the numerous and widely varied high-school courses—and every school is succeeding in this, none sending less than 80, some sending almost 100 per cent, of their pupils to high school.

What is the average success of the representatives of the several grammar schools in their first year's work in the high school? Chart Number 1 answers this question for each of the first three quarters of the school year 1911–12, and for the four years ending with the year 1911–12. This chart shows the relative success of the representatives of each school in all subjects, and in the single subject of English, which is pursued by all first-year high-school pupils—indeed, with rare exceptions by all high-school pupils.

It is unnecessary to explain in detail how these respective quality measures—represented graphically—of the work of pupils of each grammar school are secured. Only comparative, no absolute, value is claimed for them. Of what practical use are they? They serve as a most powerful

stimulus to analysis and study—study of the conditions and means, the expenditures of time, effort, and money, in the several schools that yield

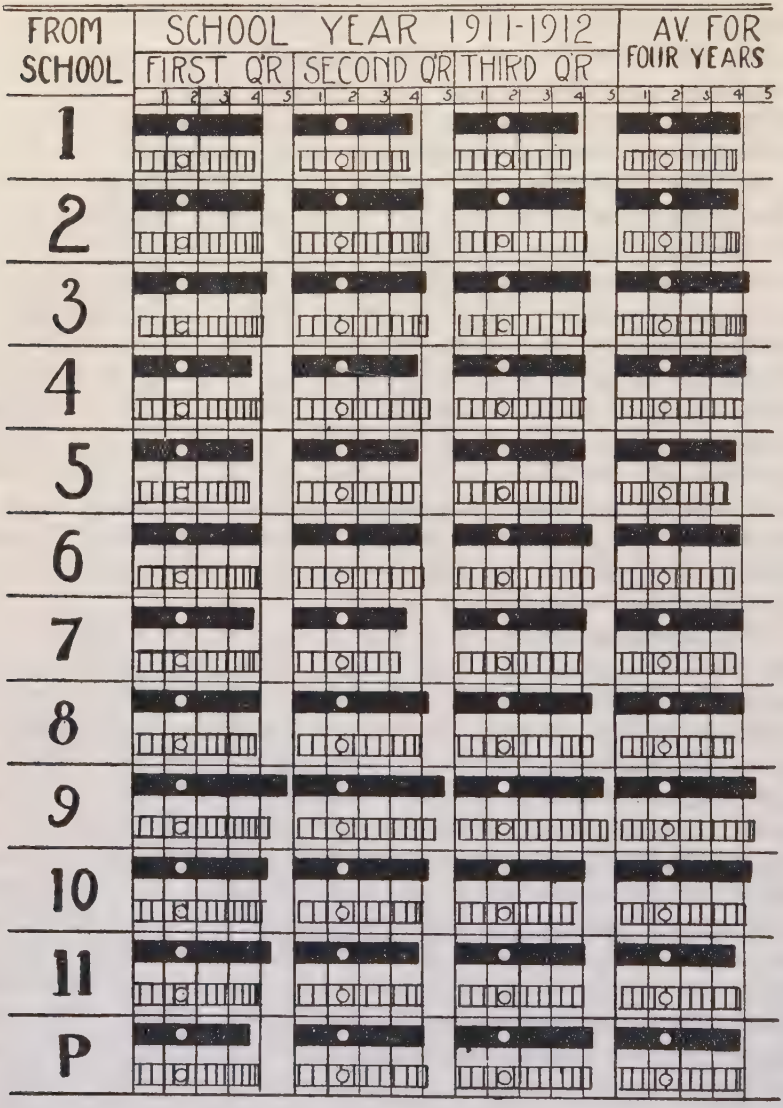

CHART I.—Showing comparative success of the product of Newton grammar schools as measured by Newton high schools

Average quality of work of Freshmen { in all subjects / in English

NOTE—The circles appearing in this and in following charts are to be disregarded. In the large wall charts from which these small charts were photographed, these circles contained the exact numerical values of the bars in which they appear; in these small charts the figures are reduced beyond the point of recognition.

such varying results, to the end that every school may adopt those plans that are proving most effective. They stimulate study—intensely practical study—and wholesome rivalry, especially of the very people on whom the success of each school's representatives most depends—principal, teachers, and pupils.

Just by way of illustration, let us make a few comparisons of the relative success of the products of the grammar schools in the light of some of the conditions involved. As the chart shows, the average quality of the work of pupils from school Number 9 surpasses that of every other school, both in English and in all subjects, in every one of the first three quarters of the year 1911–12, and also in the average for four years.

No school has the distinction of standing at the bottom of the scale as consistently as Number 9 stands at the top. Number 11, altho standing fairly well in English and in all subjects during the three quarters of 1911–12, shows the lowest average standing in all subjects for the four years. In this general average for four years, Number 9 appears superior to Number 11 by more than 17 per cent. The records show that in Number 9, altho next to the smallest of all the grammar schools, with a total average membership in all eight grades of only 126, the per pupil cost for instruction averaged for a period of five years ending with 1911–12, but $3\frac{1}{2}$ per cent higher than in Number 11, altho the latter was next to the largest of all the grammar schools, with an average membership of 817. Moreover, the value of the plants occupied by these two schools is inversely as the success of their respective products in high school; the plant of Number 9 represents an investment of $131.00 per pupil, based on average membership, while that of Number 11 represents an investment of $411.00 per pupil reckoned on the same basis.

What is going to be done, what is being done, on the basis of such indisputable measurements and records as these? I have no time to tell more than this, that the quality of Number 11's work is improving and is going to improve still more, while that of Number 9 is by no means retrograding.

Elaborate courses of study on paper, showing with mathematical accuracy the numbers of periods per week and the number of years devoted to each subject, give no adequate conception of the actual educational employment of the secondary-school youth of a community at any given time. If one week's work of every pupil now in the three Newton secondary schools could be recorded successively by a properly sensitized photographic plate, the composite picture that might be developed from this record would show the pursuit of the various subjects in the proportions graphically indicated on chart Number 2. Resolving into one hundred equal parts the education that the Newton composite secondary-school pupil is receiving just at this time, we find that one-tenth of one part is Greek, while seventeen parts are English; the remaining eighty-two and

nine-tenths parts are made up, in the proportions indicated, of the seventeen subjects, from pattern-making to mathematics, that are recorded between Greek and English.

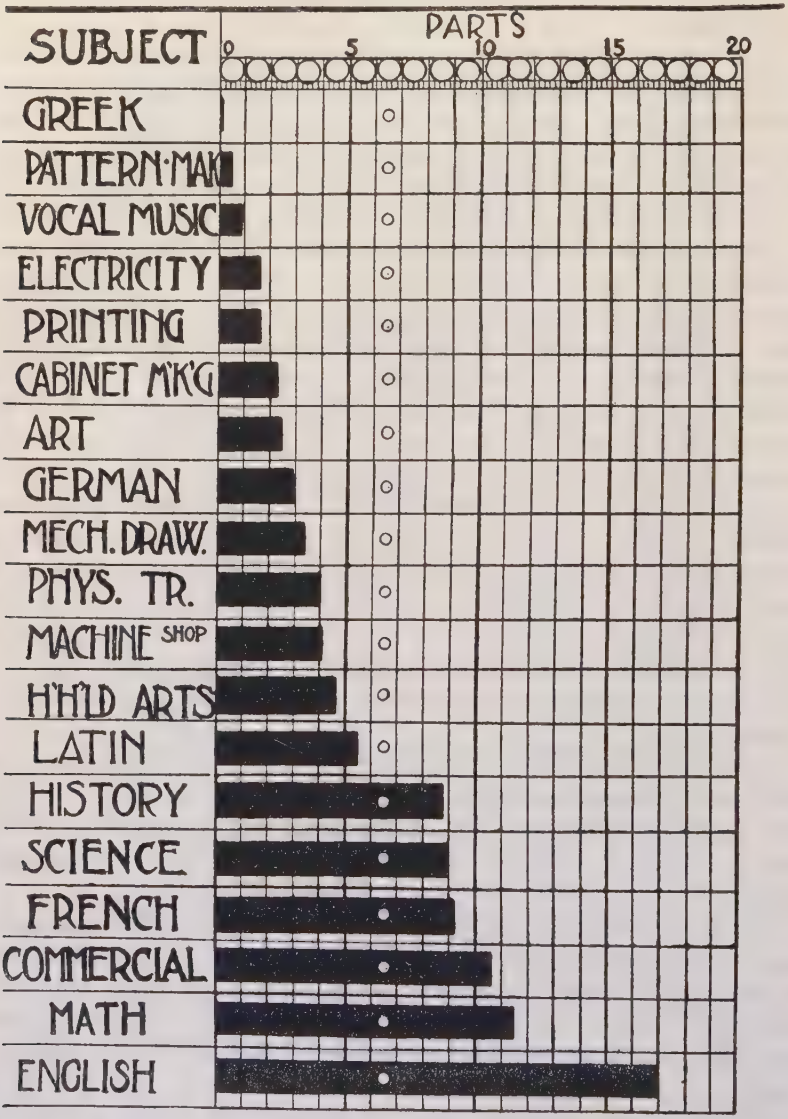

CHART II.—Ingredients of the education of a "composite" pupil in the Newton secondary schools

Is the Newton composite secondary-school pupil being adequately prepared to meet the composite demands of that society which education should fit him to serve? Some help, at least, in answering this question

may be found by studying this composite photograph, which should be complemented by a composite of the needs of social service, using this term in its broadest sense.

Academic discussion of educational values is as futile as it is fascinating. Which is more valuable, a course in Latin or a course in the machine shop? Which is more valuable, an acre of land or a loaf of bread? There are, there can be, no permanent, no absolute and universal answers to such questions as these; but there are, and there must be, temporary, relative, and local assignments of value to everything, material or spiritual, that man desires. So while we educational practitioners have been waiting on the educational theorists for an evaluation of the various subjects of actual or possible school curricula, we have been determining for our own schools definitely and minutely the relative values of every such subject. And we have done this, for the most part, without knowing it! The school administrator simply cannot avoid assigning educational values every time he determines the expenditure of a dollar.

It may give us a shock—but it will be a wholesome one—to confront ourselves with the relative values that we have thus unconsciously assigned to various subjects. Chart Number 3 shows graphically the relative value assigned today to every subject taught in the Newton High School. It has been determined, wisely or unwisely, thoughtlessly or intelligently, that in that school just now 5.9 pupil-recitations in Greek are of the same value as 23.8 pupil-recitations in French; that 12 pupil-recitations in science are equivalent in value to 19.2 pupil-recitations in English; and that it takes 41.7 pupil-recitations in vocal music to equal the value of 13.9 pupil-recitations in art.

Thus confronted, do we feel like denying the equivalency of these values —we cannot deny our responsibility for fixing them as they are? That is a wholesome feeling, if it leads to a wiser assignment of values in future. Greater wisdom in these assignments will come, not by reference to any supposedly fixed and inherent values in these subjects themselves, but from a study of local conditions and needs. I know nothing about the absolute value of a recitation in Greek as compared with a recitation in French or in English. I am convinced, however, by very concrete and quite local considerations, that when the obligations of the present year expire, we ought to purchase no more Greek instruction at the rate of 5.9 pupil-recitations for a dollar. The price must go down, or we shall invest in something else.

Charts Numbers 4 and 5 show the relative values now assigned to the various subjects taught in the Newton Technical and the Newton Vocational schools respectively.

Whether we desire to do it or not, we express our relative valuations of different subjects under given conditions by the percentage of our available funds that we expend for each, just as the housewife controlling a limited

family budget expresses her valuations of the various necessities, luxuries, and frivolities of existence by the proportion of her budget that she devotes to each. The housewife is not seldom charged with large responsibility for

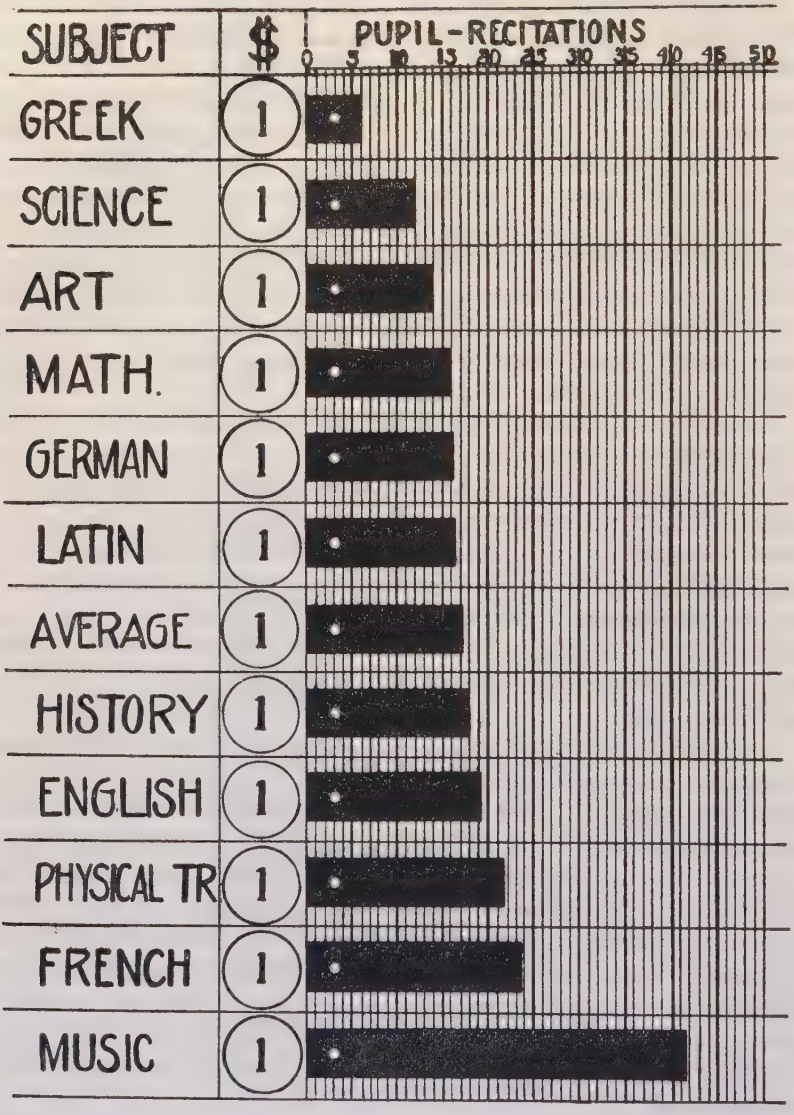

CHART III.—Equivalent educational values in the Newton High School as shown by the purchasing power of a dollar expended for class instruction.

the high cost of living, on account of her lack of wisdom in handling the family budget; I gravely doubt that we educational administrators show any greater wisdom than the average housewife in the disposition of our always limited school budgets.

Unquestionably the first step toward improvement, both for the housewife and for the school administrator, is to secure definite, detailed, and significant knowledge of the actual disposition of the budget, whether

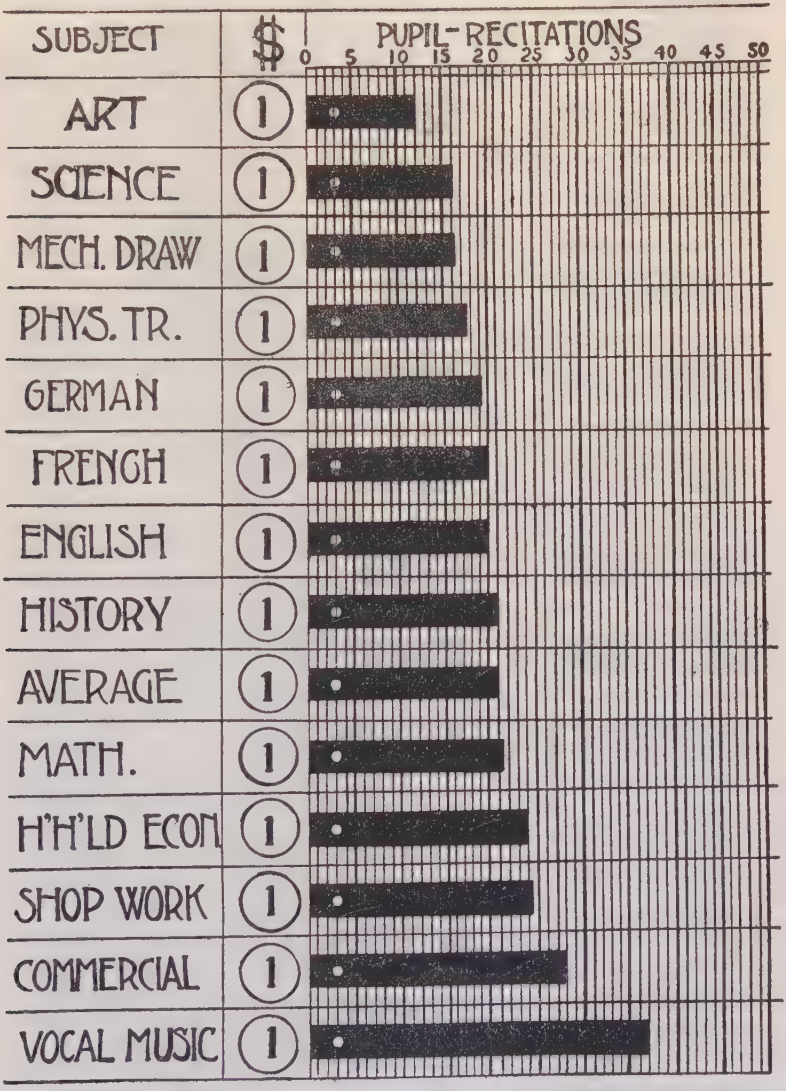

CHART IV.—Equivalent educational values in the Newton Technical High School as shown by the purchasing power of a dollar expended for class instruction.

of the family or of the school. Chart Number 6 shows the apportionment of every dollar now being expended for instruction in the Newton secondary-school system. Of every dollar so expended, 0.3 of one cent goes for Greek, while 15.6 cents goes for English. We buy 0.4 of one cent's worth of

instruction in vocal music while buying 12.1 cents' worth of instruction in mathematics. We think it best—or are we doing it without thinking?—to buy 7 cents' worth of French for every 3 cents' worth of German; and we

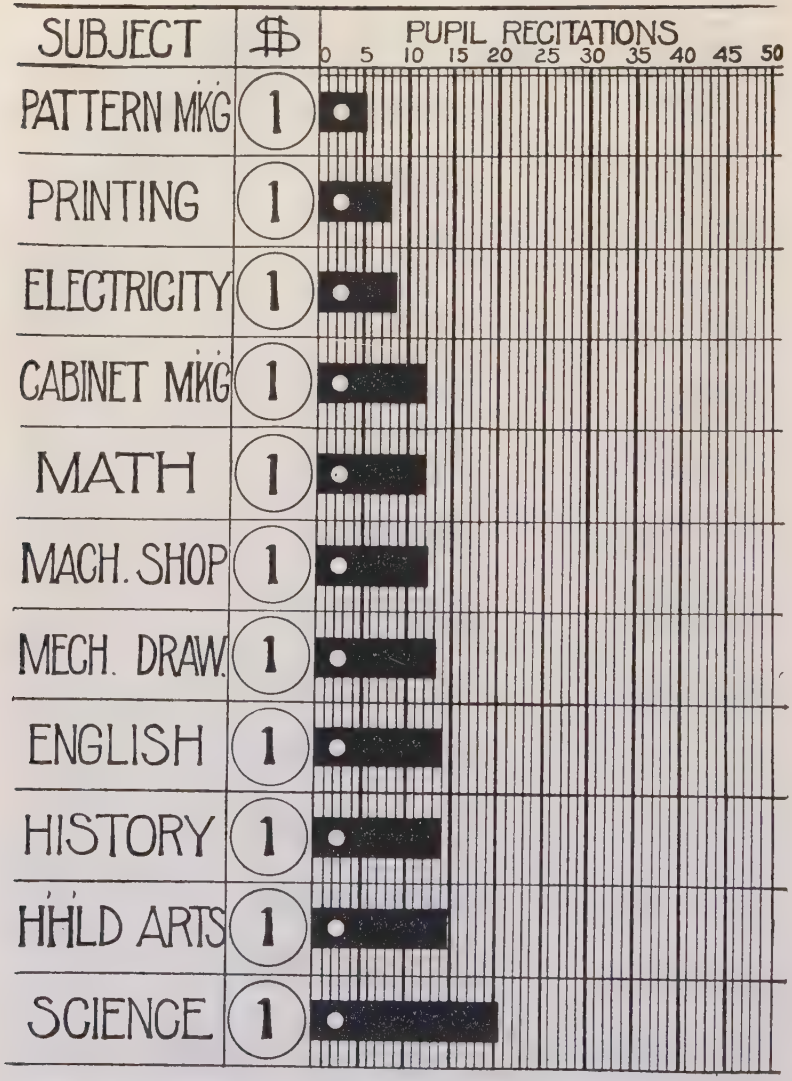

CHART V.—Equivalent educational values in the Newton Vocational School as shown by the purchasing power of a dollar expended for class instruction.

are buying no Spanish at all. We are spending 5.1 cents for instruction in the household arts—in the preparation of girls for homemaking—to 6.1 cents for instruction in commercial branches—in the preparation of girls and boys for clerical and business service.

Charts Numbers 7, 8, and 9 show the apportionment of every dollar expended for instruction in the Newton High, the Newton Technical, and the Newton Vocational schools respectively.

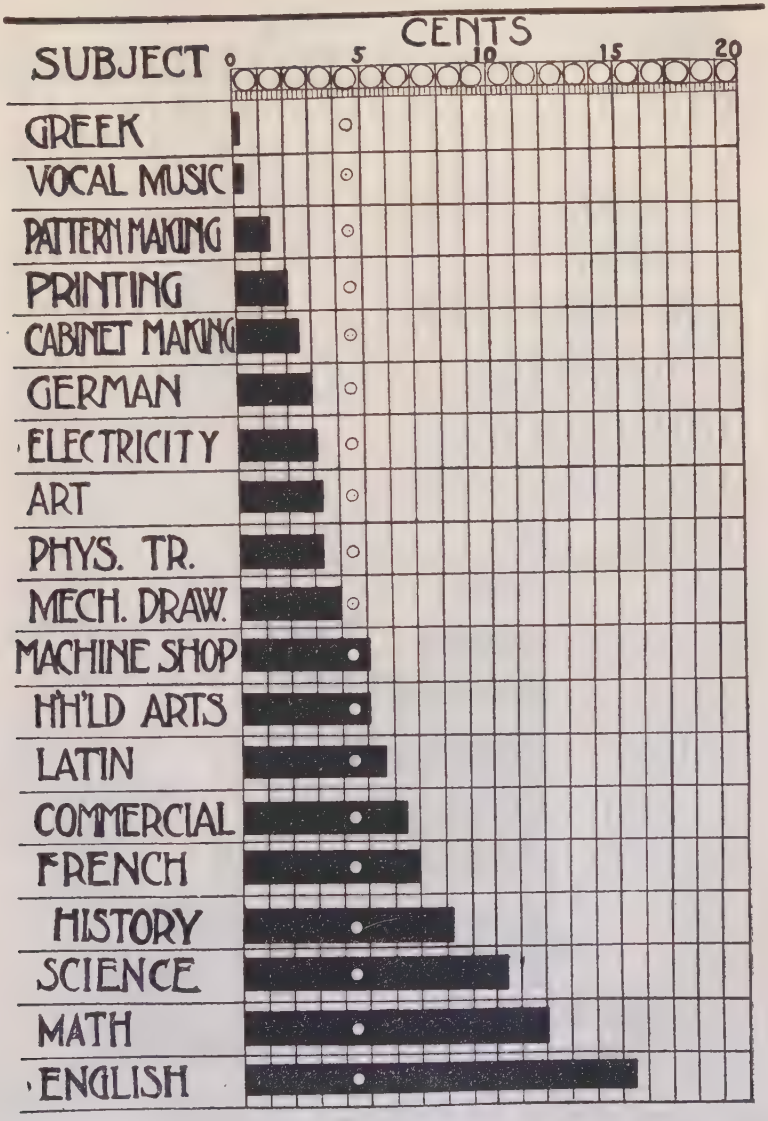

CHART VI.—Relative valuation of different subjects in the Newton secondary schools as shown in the apportionment of every dollar expended for instruction.

Comparison of the costs of the same unit under different conditions is perhaps the best starting-point for a campaign to reduce unit costs or to improve the quality of units of service. To be of any practical value, such

comparisons must be made of costs arising under conditions that can be thoroly studied. Of what earthly use are our interminable comparisons of teachers' salaries and annual expenditures per pupil from one end of the

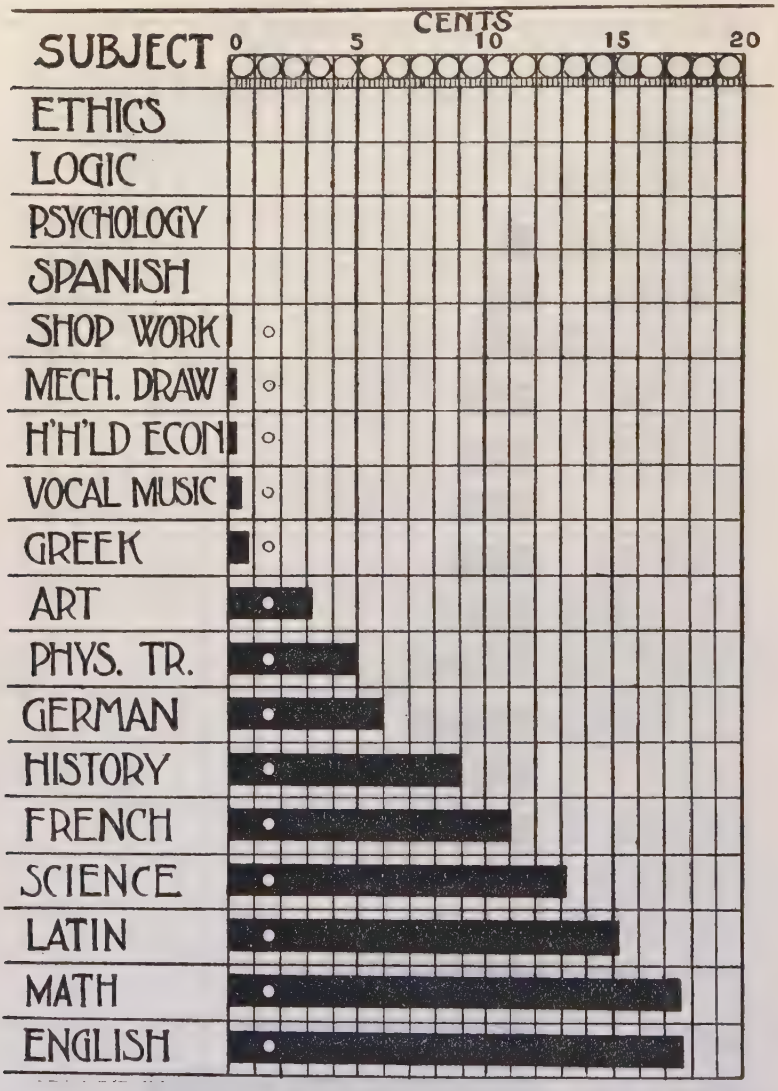

CHART VII.—Relative valuation of different subjects in the Newton High School as shown in the apportionment of every dollar expended for instruction.

country to the other, when we know nothing, when we attempt to find out nothing, when it might be practically impossible if we tried to get adequate knowledge, concerning the quantity and quality of teaching service rendered for which varying salaries are paid, and the amount and character of instruction given on which per pupil costs are based?

Every school system presents within itself abundant opportunity for the comparison of unit costs; the conditions under which these costs arise

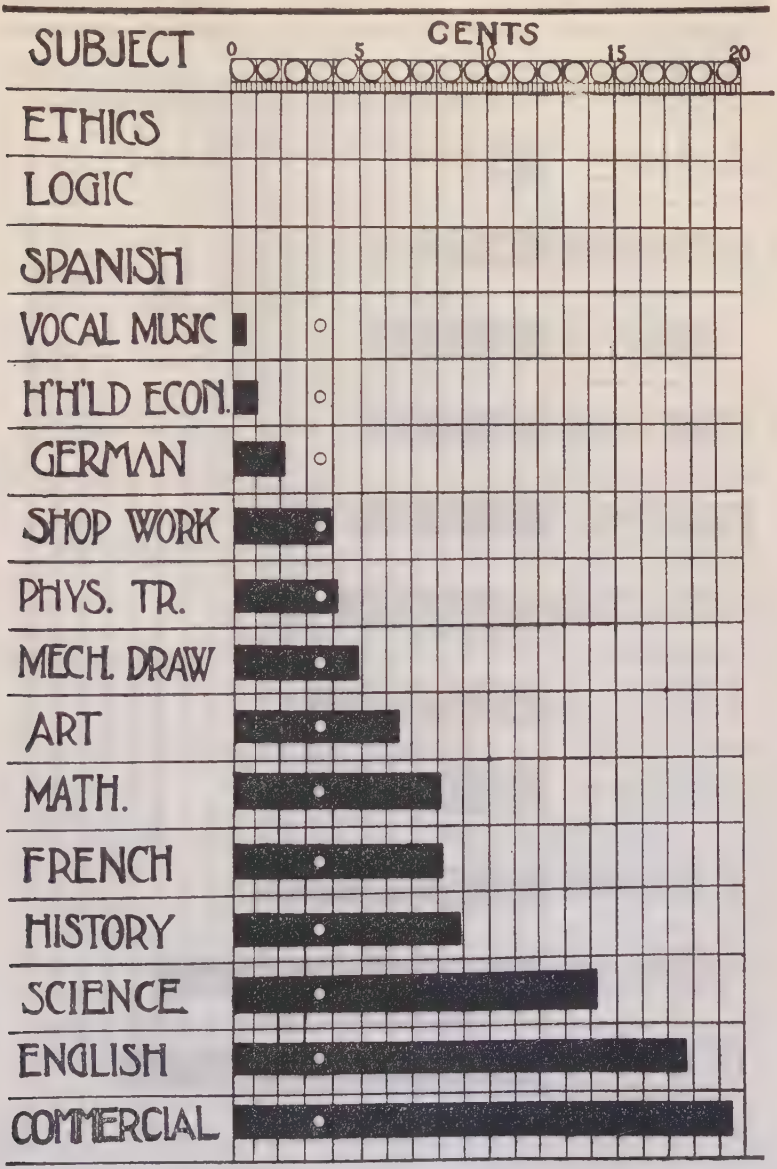

CHART VIII.—Relative valuation of different subjects in the Newton Technical High School as shown in the apportionment of every dollar expended for instruction.

are at hand, subject to any kind and degree of analysis and study that may be necessary. Chart Number 10 shows the cost of one pupil-recitation in certain subjects, each one of which is taught in two or more of the Newton

secondary schools; this chart shows also the average cost per pupil-recitation, regardless of subject, in each of these schools.

Why is a pupil-recitation in English costing 7.2 cents in the vocational

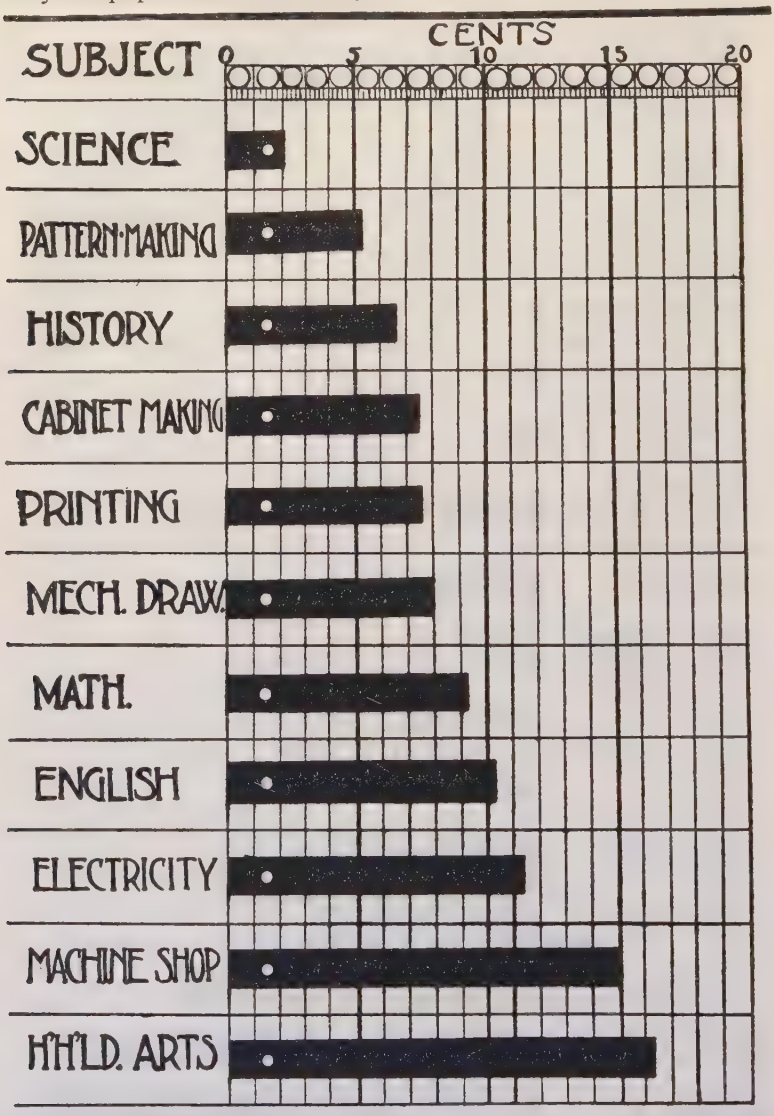

CHART IX.—Relative valuation of different subjects in the Newton Vocational School as shown in the apportionment of every dollar expended for instruction.

school while it costs only 5 cents in the technical school? Is the "vocational" English 44 per cent superior to the "technical" English, or 44 per cent more difficult to secure? Why are we paying 80 per cent more in the vocational than in the technical school for the same unit of instruction

in mathematics? Why does a pupil-recitation in science cost from 55 per cent to 67 per cent more in the Newton High than in either of the other schools?

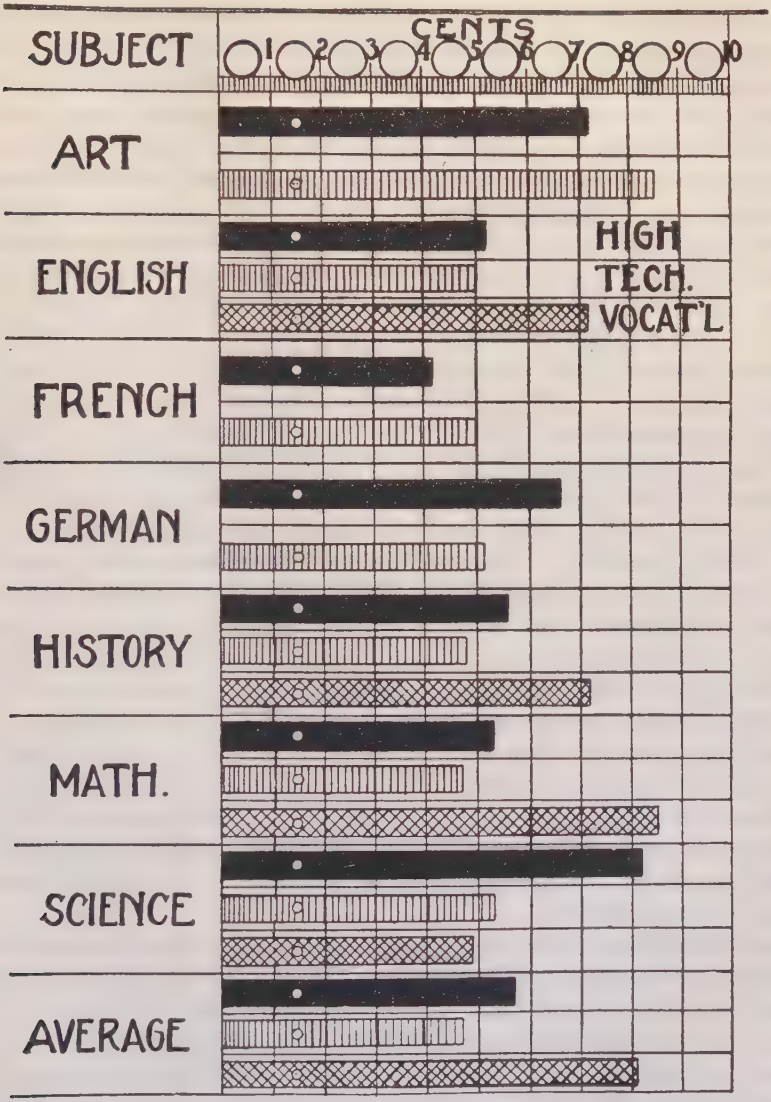

CHART X.—Cost of one pupil-recitation in certain subjects in the Newton secondary schools.

All the conditions under which these varying costs arise are at hand. By studying them we can answer these and scores of other similar questions which a comparative chart such as Number 10 suggests. More than that, so far as the conditions are within our control, we can make changes which

will vary costs and quality of service, to the end that we may secure a maximum of service at a minimum cost in every school and in every subject.

There are two phases of every practical problem of school administration, even of the details of classroom procedure; these are the financial and the educational. They are inseparable; the frequent, I may say the prevalent, effort to distinguish the problems of the school into financial or business on the one hand, and educational on the other, results in two groups of problems barren of significance. Those school boards who insist on reserving to themselves, or committing to a special business manager, supposedly an expert, the business administration of a system of schools, while they impose on a superintendent, presumably an educational expert, the so-called professional administration of that same system of schools, and those superintendents who advocate this plan, or meekly acquiesce in it, give evidence of about as sound and comprehensive a grasp of the real problem of educational administration as the would-be manufacturer of shoes must have of that industry, who would put his factory in charge of two independent experts, one of whom knew all about shoes as a finished product, and all about the processes of their manufacture, but knew little and was expected to know less about costs, while the other knew nothing about shoes, but was a past master of business and finance.

The inseparability of the financial and educational aspects of school problems is forcibly illustrated by Chart Number 11. Equally well, this chart illustrates also the prime necessity of penetrating analysis as a means of revealing significant facts. At the top of the chart, figures are given showing that in the Newton High School the average annual cost of classroom instruction was but $1.33 higher per pupil in 1910–11 than it was seven years earlier. This slight advance of barely 3 per cent during a period of general and large rise in prices might easily be taken as evidence of the constant and most careful scrutiny of every detail of costs. Such is not its true explanation, however; for that slight advance was more the result of accident than of cost-conscious planning in the organization and conduct of the school.

As the analyses in the center and at the bottom of the chart show, the slight increase of $1.33 per pupil is the resultant of four factors, the variation in any one of which has tended to increase or to diminish the total cost per pupil by an amount from nearly two to more than four times that of the actual net increase. This actual net increase of $1.33 per pupil was due to the fact that the combined effects of two of the four factors on which the total per pupil cost of high-school instruction depends tended to reduce that total cost by the same amount, less $1.33, as the combined effects of the other two factors tended to raise it.

The significance, both financial and educational, of the facts that this analysis reveals is most striking. The increase of 1.7 recitations per week per teacher reduced the annual cost per pupil by $3.10; this was equivalent

to a saving for the school of nearly $2,200.00, enough to pay for nearly 13,000 pupil-recitations in expensive Greek. Did the teachers or the efficiency of their work suffer on account of this increase of fifteen minutes per day in their classroom service? If so, by how much? These are educational questions that may be separated—but only temporarily—from their financial bearings.

NEWTON HIGH SCHOOL

	1903–04	1910–11
Total cost of classroom instruction	$35,576.16	$30,961.60
Average membership	822	694
Cost per pupil	$43.28	$44.61
Increased cost per pupil		$ 1.33
ANALYSIS OF THE INCREASED COST		
Number of pupils per instructor	27.6	28.3
Average salary of instructors	$1,193.79	$1,263.74
Average number recitations per week per instructor	21.4	23.1
Average number pupils per recitation class	22.8	24.7
Average number recitations per week per pupil	17.7	20.1
COST		
	Reduced	Increased
On account of:		
Increase in number of recitations per week per instructor	$3.10	....
Increase in number of pupils per recitation class	3.24	....
Increase in average salary of instructors	....	$2.47
Increase in number of recitations per week per pupil	....	5.20
Total	$6.34	$7.67
Net		$1.33

CHART XI.—Showing cost of regular classroom instruction

The increase of 1.9 pupils per recitation class further reduced the annual per pupil cost by $3.24—equivalent to a saving of over $2,200.00 for the school. Was the work any the less efficient on account of the size of classes averaging 24.7 pupils each than it was with classes averaging 22.8 pupils each? Another question to be answered primarily from the educational standpoint; but a question whose answer is no less significant financially than educationally.

An increase of barely 6 per cent in the average salary of teachers effected an increase of $2.47 per pupil. If the average quality of service in the latter year was not inferior to that of the former, we may be satisfied that this slight increase was more than justified by the general rise of prices, teachers' salaries included, during the period under consideration.

By far the most potent factor in affecting costs was the increase in the average number of recitations per week per pupil. An increase of 2.4 recitations involved an increased expenditure of $5.20 per pupil, or of more than $3,600.00 for the school. Were the pupils better served with 20.1 recitations per week than they were with 17.7?[1]

What is the optimum number of recitations per week, on the average, for pupils in an academic high school? We may frankly confess that we do not know the answers to either of these questions, important alike educationally and financially. But we do know that we are constantly determining, and that we must continue to determine, the number of recitations per week that shall be given to our high-school pupils; and we know further that our determination of this matter will affect, and we may easily find out exactly how much it will affect, our expenditures.

Fully conscious of these things, stimulated also by the necessity of reducing expenditures in some way, and further influenced by investigations which revealed that many pupils who were failing in one or more subjects were attempting to carry a number of recitations considerably larger than the comparatively high average for the school, we determined about two years ago to adopt measures that would probably result in a reduction in the average number of weekly recitations per pupil in the Newton High School. Accordingly a number of recitations per week, varying somewhat from course to course and from year to year, but nowhere exceeding seventeen, was established as "normal"; on taking up the work of a new year pupils were to be allowed to exceed the normal amount only on condition that their work of the previous year gave satisfactory warrant for expecting that they could carry more than the normal work successfully; furthermore, pupils undertaking more than the normal work were to have their work reduced to the normal by dropping a subject at any time, after due warning that their work was unsatisfactory. This last requirement seemed to be justified on the ground that any pupil who is failing in his work must be doing so from one of two reasons, either because he is undertaking more than he can do well, or because he is not disposed to apply himself earnestly; in the former case, the remedy is obviously a reduction in the undertaking, in the latter case it seems scarcely less obvious that no more than a normal amount of expense should be incurred by the giving of subjects that the pupil is not really trying to master.

[1] These averages of recitations per week do not include exercises in vocal music, physical, and manual training, and optional work in household economics, altogether averaging from two to three exercises per week per pupil, the higher number in the later year.

With some modifying details not necessary here to mention, the above rules were announced and explained to pupils and parents about two years ago and were put into effect the following September; that is, in September, 1911. One effect was prompt and one result of this effect was easily measured: the average number of weekly recitations per pupil was reduced from 20.1, the number of the previous year, to 17.8, only one-tenth more than the average of 1903–4, and thereby the total expense for instruction was reduced by about $4,100.00.

What educational gains or losses are resulting from the limitations imposed on the extent of a pupil's work? This is the important question that we are now trying to answer. I am convinced that no definite nor even reliable answer can be found in the mere opinions even of those who come in closest touch with the pupils concerned. A recent deliberate expression of opinion on the advantages and disadvantages of this plan of limiting the extent of a pupil's work was made by the principal and the heads of departments, after the plan had been in actual operation about one year and a half. The opinions so expressed were about equally divided for and against, with a slight tendency, on the whole, to favor the plan of limiting, and with a fairly strong demand that the plan be given further trial.

We have made a careful and detailed study of pupils' work under the two plans, the old plan—an indefinite plan, rather a custom, in accordance with which pupils who had done poor work for whatever reason were usually allowed, if not actually encouraged, to undertake still more work at the beginning of a new year, with the hope that the ground lost in the past might be regained—and the new plan of limiting each pupil's work to the amount that he had given evidence of being able to do satisfactorily. The chief results of this study are shown on chart Number 12.

This chart embodies the chief results of two sets of comparisons of the average pupil-performance under the old and under the new plans. In one case the average performance of a pupil in the Sophomore class of 1910–11, the last year under the old plan, was compared with the average performance of a pupil in the Sophomore class of 1911–12, the first year under the new plan. Consideration of the general school history of these two classes revealed no grounds for thinking that one was, on the whole, superior to the other in natural or acquired ability. The other comparison was made between the average performance of the same pupils under the two plans; that is, the performance of the Sophomores of 1910–11, the last year under the old plan, was compared with the work of these same pupils as Juniors in the following year, the first year of the new plan. In this last comparison the work was considered only of those pupils who were in the school thruout the Sophomore and Junior years.

The significant points of comparison in both these cases were these three: (1) the quantity of satisfactory work accomplished—that is, the number of

"points" passed, or earned; (2) the quality of the satisfactory performance —that is, the average standing in subjects passed; and (3) the percentage of waste, that is, the ratio of the number of points failed to the number of points earned.

The significance of these three points as tests of comparative efficiency are quite evident, if, for a moment, we regard as the object of the school the turning-out of a maximum number of satisfactory points per pupil, of the

I. 189 Sophomores 1910–11 *167 Sophomores 1911–12*		II. 162 Pupils as { Sophomores 1910–11 *Juniors 1911–12*
AVERAGE NUMBER POINTS		
20.57 *18.58*	Attempted	20.82 *18.89*
18.36 *16.64*	Earned	19.06 *16.90*
1.95 *1.70*	Gross waste	1.67 *1.77*
1.59 *1.20*	Net waste	1.41 *1.33*
8.66% *7.21*	Net waste is of points earned	7.40% *7.87*
73.77% *73.70*	Average quality	75.13% *72.98*
61.00% *45.00*	Percentage of superior performance (Pupils earning 18 points or more with average of 70% or more)	63.00 *41.00*

GAIN AND LOSS AFTER LIMITATION OF PERIODS

Sophomores			Juniors	
1.72 (9.4%)	Loss	Points earned	Loss	(11.3%) 2.16
1.45% (Decr.)	Gain	Average waste per point earned	Loss	(Incr.) .47%
.07%	Loss	Average quality	Loss	2.15%

NOTE.—Italics refer in every case to pupils working under the plan of limited periods (see explanation in the text). The comparison of Sophomores with Sophomores is made in the column at the left; that of Sophomores with Juniors in the column at the right.

CHART XII.—Comparison of pupil-performance before and after limitation of periods

highest quality, with a minimum of waste. Waste, as in any other productive industry, is to be avoided, as the cost of it must be added to the cost of the satisfactory product.

Without taking any time to go into details, these studies showed, as is represented on the chart, that in the comparison of the average performance of Sophomores, those working under the new plan earned 1.72, or 9.11 per cent, points less than did those under the old plan; that the percentage of waste was 1.45 per cent less under the new plan; and that there was a slight loss in quality—amounting to 0.07 per cent—under the new plan. The study showed further that the same pupils in their Junior year earned

under the new plan an average of 2.16, or 11.3 per cent, fewer points than in their Sophomore year under the old plan; that their percentage of waste under the new plan was 0.47 per cent greater than under the old; and that the average quality of passable achievement under the new plan was 2.15 per cent lower than under the old.

At most, I think the results of this study should be regarded merely as indicative; I do not consider that it satisfactorily proves anything regarding the relative superiority of the two plans of administration that we are trying to test. The most that can be said unconditionally of these results is that they give no warrant whatever for concluding that our plan of limiting the amount of work that a pupil may undertake is superior—as judged by the quantity and quality of achievement, and the net waste involved—to the former plan. Further studies of this question are now being made, and I already have some data bearing on it which there is no time to present. Neither is there time even to mention several important considerations which the study suggests.

I have presented this study—incomplete and inconclusive as it is—as also all the suggestions of studies preceding, merely as illustrations—as leaves out of our daily notebook or chartbook—of some of the methods that we are pursuing right now in our efforts to improve our school system thru the application of principles of scientific management.

C. THE DETERMINATION OF THE RELATIVE VALUE OF DETAILS WITHIN THE COURSE OF STUDY

A. DUNCAN YOCUM, PROFESSOR OF PEDAGOGY, UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA.

A test of the relative worth of details within the general course of study should be both universal and practicable. To be universal, it must measure usefulness not only from the standpoint of direct preparation for life or social efficiency, including specialization and culture, but from that of general knowledge and mental development. To be practicable, the test must not only be stripped of all vagueness, and so reduced from rainbow generality to a naked definiteness which specifically and certainly points the way to the pot of gold, but the definiteness must be so highly analytic and so capable of mathematical expression that the gold pieces can be counted and their relative value measured. The very vocabulary of our past discussions shows the absence of such analysis. To say that subject-matter must be "useful" is either to include as a factor in the test the thing which is to be tested, or to limit usefulness to a direct preparation for life which ignores all mental discipline which is not specific. That is, usefulness either brings anything into the course of study on the ground that everything is useful to some one or other some time or other, or it excludes

the varying apperception and many-sidedness of experience essential to application and general discipline. To include only what is capable of being related to other knowledge is either to include all, or to limit relationship to what is within the comprehension of learners at a particular stage of advancement. But the most complex ideas which can be included in a course of study are, as partial and imperfect concepts, within the comprehension of most normal children at the age when they enter school. Comprehension, therefore, reduces itself to any part of a possible many-sidedness which is immediate for a particular learner or class of learners.

To argue that subject-matter must be interesting is to fail to distinguish between interest inherent in content and that which results from method. Inherent interest, or interest based on natural tendency or explained by culture epoch, does not determine whether a thing is useful or not, but is merely a partial measure of relative usefulness. The most essential things in the course of study often lack inherent interest. The problem of the school is to *make* them interesting thru effective method.

If the present discussion is to be practical, its vocabulary must be made definite thru the analysis of the four factors involved in it: the details of the course of study; the phases of mental activity thru which they should result in mental development; the phases of direct preparation for life which they should further; and the test thru which their value to both mental development and direct preparation is to be measured.

The course of study must be analyzed into details, i.e., into definite and specific relationships. By details I mean ideas or activities in the various definite and specific relationships of which they are capable. For example, in planning a course of study in geography, we are not concerned with whether we shall include such general topics as location, population, or cities. They are capable of so many useful relationships that determination of their worth as related to each other is unnecessary, and their continued use in instruction a matter of course. Our problem is whether to teach particular cities; whether each city that is taught shall have its population exactly given, have it reduced to round numbers, or compared with that of some more familiar city; whether it shall be exactly located on railroad, body of water, political subdivision, or by parallel and meridian; generally located in grand division, country, physiographical region, or industrial section; or relatively located, as near a seaport or industrial center, or more specifically, by point of compass. That is, the problem is one of analysis and the comparison of definite relationships. Formal self-activity must be analyzed into its educational phases, based on the relative retention and definiteness of relationships.

By relative worth or usefulness, I mean relative furtherance of the educational aim, both direct and indirect—indirect furtherance thru culture, information, discipline, or mental development; and direct furtherance thru relationships which specifically and certainly further right living,

good health, industrial efficiency, social service, good citizenship, and the proper employment of leisure. In the case of direct furtherance, the usefulness of details obviously depends upon relationships, and their relative usefulness upon the measurement of relationships. In that of indirect furtherance, what is to be measured is not so self-apparent. Here past analysis has been logical, psychological, or philosophical, and has dealt either with psychological and physiological parts with which education is concerned as wholes, or with wholes, such as discipline and apperception which have not been adequately analyzed into their pedagogical parts. Pedagogical analysis must limit itself to the determination of those phases of activity thru which instruction can develop all others. Since there is no development without retention, these truly formal phases of mental activity can be distinguished from each other pedagogically only thru the relationships by which they hold details in mind.

Cumulative impression, the first phase of formal self-activity and the means to Professor Bagley's emotional general idea, is largely dependent upon forgotten relationships, associated about a common idea or experience. We have not fully enough recognized the potential value in what children forget—the educational service of a cumulative mass of forgotten lessons, which, if properly centered, can give to the most fundamental truths that the school must teach, the emotional reinforcement, gained by fundamental ideas not taught in school, from thoughts that have vanished and days that are gone. Mere remembrance, the second phase of formal self-activity, holds details in mind thru partial concepts—the varying and incidental relationships, first made familiar to us by Dr. Earl Barnes. Unfortunately, in place of thanking our lucky stars that the great mass of what we teach is remembered by children in any way at all, we scoff at, as blunders, the very germs of mental growth. One of the first steps toward efficiency, from the standpoint of the course of study—and one which should cheer us as we hear recitations and inspect examination papers—is such centering of forgotten knowledge and multiplication of partial concepts as will transform into the highest usefulness what has been regarded as the waste product of the school.

Varying apperception, the third phase of self-activity which is truly formal, holds ideas in mind thru many-sided and varying relationships. With the type of interest which it arouses, it has sometimes come too near to being the only aim of the modern school. As the circus parade of the modern recitation passes by with its camels and its elephants, its clowns and living skeletons, it must be something more than a passing show. Specific discipline, the fourth phase, makes details sure in certain and definite relationships. The chief value of an adequate test of relative worth will be to discriminate in the course of study between the few ideas and activities that are so highly useful in a specific way that they must be certainly mastered by all pupils in every school, and the multitude of those whose

varying apperception by each pupil according to varying mental content, interest, attention, and retentiveness, constitutes a safeguard to individuality in the most ironclad scheme upon which promotion is based. The pity of it is that individuality is so often safeguarded by condemning it to the same grade for an additional year, in place of developing more of it in the new environment of the grade above.

General discipline, the culminating phase of formal self-activity, is possible only for a relationship having a stimulus general enough to be found in fields of experience other than that in which it is developed. In place of being an incidental product of certain traditional subjects, the conditions favorable to it for every useful idea should become the chief aim of investigation and instruction. The strangest thing about it is that when certain distinguished college and university presidents emphasize the fundamental importance of reason or self-activity, they contrast it with drill work and routine, when every investigation of formal self-activity yet made demonstrates the fact that reason is dependent upon a definiteness and a certainty of ideas that drill and routine alone can give. We have been carried too far in our reaction from Gadgrind and Squeers. The slavish and mechanical mastery of the relationships we remember by and think with is the necessary condition to intellectual freedom.

From the standpoint of a test for relative worth, the significant thing in all this is that the usefulness of formal self-activity, like that of directly useful ideas and activities, is dependent upon relationships. Each phase of direct preparation for life must be analyzed into the relationships which specifically further it.

In the case of direct furtherance of the educational aim, analysis must concern itself with the discovery of the subordinate aims and details which certainly further right living; health, industrial efficiency, social service, good citizenship, and the proper employment of leisure, with a view to the determination of the relative worth of each. The analysis of morality, health, and social service in a logical sense has been quite fully accomplished. Our notion of what we mean by industrial efficiency, good citizenship, and preparation for leisure is misleading, partial, and vague. In no phase of direct preparation, however, has logical analysis been exhaustive or has analysis of a pedagogical sort been brought to bear. It is only when such specific aims as obedience to law, personal cleanliness, and honesty have been logically analyzed into all useful definite relationships, and logical analysis has been made pedagogical by adding to them, thru cumulative impression, mere remembrance, varying apperception, specific discipline, and general discipline, that direct preparation for life can become effective. For example, citizenship cannot be adequately taught by merely mastering facts from United States history or memorizing the Constitution, but by the development of feelings and ideals, even the partial mastery of words that give opportunity for further growth of civic knowledge, many-sided asso-

ciation with experience, and knowledge in general, and a complex system of what is specifically useful to citizenship, including the conditions most likely to insure the carrying-over of habits to and from other fields of experience. That is, direct and indirect furtherance of the educational aim are supplementary and both are useful thru their relationships. The relative educational worth of subject-matter is determinable only thru the measurement of relationships.

Now there are only three ways in which relationships can be measured. Their many-sidedness can be counted, their recurrence can be counted or estimated, and their degree of inherent sensational or emotional appeal can be gauged with sufficient exactness to be mathematically expressed. All other apparent modes of measurement are reducible to these three. Kind of relationship tells whether the aim is furthered or not: that is, whether or not the relationship is useful, but not how useful. Here comparison is qualitative and not quantitative. Relative permanency measures relationships, but is either reducible to many-sidedness, frequency of recurrence, and sensational or emotional appeal, or is dependent on formal repetition as a factor in method. Interest can be measured, but if it is not analyzable into inherent sensational or emotional appeal, many-sidedness, and recurrence; like permanency, it is insured thru method. It follows that those details are relatively most useful in their furtherance either of a specific phase of the educational aim or of the formal phases of mental development:

1. Which are most many-sided in their useful relationships.
2. Which are most frequent in their useful recurrence.
3. Which inherently make the strongest sensational or emotional appeal that is useful.

Relative many-sidedness, recurrence, and emotional appeal should determine the general educational content. But to relative usefulness must be added immediacy of many-sidedness, recurrence, and emotional appeal, in order to determine the point at which the most useful details shall first be taught. These factors do not determine usefulness—usefulness results from direct and indirect furtherance of the educational aim —but by measuring usefulness, they determine relative usefulness.

It remains to be seen whether the test of many-sidedness, recurrence, and sensational appeal furnishes a definite and mathematical means of expressing relative value, and to what extent exact measurement of relative worth is essential or desirable. Whether or not it is very often necessary to go beyond the judgment more useful or less useful, if the test is to be scientific in the sense of being universally valid, it should be possible to judge how much more or how much less useful one detail is than another. Fortunately, as has already been shown, each of the factors in the proposed test is capable of mathematical expression. Many-sidedness can be measured by counting relationships, the recurrence of each can be counted, and degree of sensational or emotional appeal can be estimated.

From the standpoint of actual application, however, such exact measurement will rarely be necessary. The purpose of the test is twofold: to discriminate, first, between details useful enough to be included in the general course of study, and those so low in relative value that they should be excluded altogether; and second, between the details useful enough to be included, and those so high in their usefulness in some specific relationship that they must be made certain and permanent thru memorizing and review.

It will probably be found that there are a sufficient number of relationships thus pre-eminent in their relative usefulness to occupy the little time effective for memory drill. They will collectively not only constitute the sole uniformity which should be required of all learners in a given locality, but will occasionally differ with locality, because the highest many-sidedness, recurrence, and emotional appeal vary somewhat with environment. Once determined, however, their mastery should not be left to individual initiative, whether of teacher or of pupil. From the standpoint of democracy, it is the most serious waste in education, that the learner who is too careless or inefficient to gain them should fail of promotion, or fall out of school. Their certainty and permanency are not only essential to the individual, but to the community and state. If a Helen Kellar can be made to think, to acquire culture, and to develop high ideals, the mastery of supremely essential relationships is possible to all. And on the same ground that the state compels citizens thru taxation to support the school, and children to attend school, their mastery should be compelled of all. Here, after all, is the fundamental efficiency test for the school. Are the pupils certainly and permanently mastering knowledge and activity in the specific relationships most useful to the individual and to the state? In an age of analysis and of inductive science, it is a shame to us as educational experts that we should still be men of opinion, when half the energy and the research which in other fields of human endeavor have forced individuals to yield to the inexorable compulsion of universally valid truth will make us men of science, capable of determining with definiteness and finality the fundamental problems of the school.

If exact comparison is little likely to be necessary in the determination of essential details, it is still less likely to be involved in the comparison of the great body of relationships. At the other end of the scale of relative values will be found a mass of details so low in their direct and indirect usefulness that exact comparison is unnecessary. Ideas or activities useful in a single or a rare relationship, and lacking in the strong sensational or emotional appeal which might otherwise compensate for many-sidedness or recurrence, must not cumber the course of study, or, when they creep in as connecting links, must be left wholly to incidental mastery.

Between the highly useful and the relatively useless will be found the major part of the course of study, presenting in its general classifications

enough range in relative worth to make its exact judgment readily possible, but, in its details as they are grouped together, a close enough approximation to equal usefulness to make selection vary with individuality and locality. It is this third class of useful material, with its groups of details of approximately the same relative worth, that renders unnecessary and undesirable the kind of uniformity in courses of study which has been the dream of theorist and martinet. Ultimately, courses of study will be largely uniform in what is so useful that its memorizing and retention are compelled of all—uniform in what is rejected as relatively useless, but, as regards the mass of material presented for more individual mastery, variable in details, and uniform only in their relative worth.

Whether from the standpoint of mental development or from that of direct preparation for life, the little time available for certain memorizing is too short to be largely devoted to details just because they are true, or necessary to the completeness that some textbook-maker seeks for his specialty. What ideas come thronging because a volcano is not always a mountain, or because Berlin has three times the population of some local city? How useful and frequently recurring in the experience of those of us not specialists are the facts in the peninsular campaign or the technical details of some complex industrial process? A thousand facts such as these still figure in the school course—things to be remembered that take the place of the things we remember by and think with.

The test that I have outlined, tho technical in its justification, is simple enough and definite enough to be applied by every school teacher. As it is applied by educational experts, its most useful result will not be a partially uniform course of study, but a cumulative system of relationships organized thru their relative usefulness. On the one hand, it will weld together the relationships essentially useful to citizenship, industry, and other phases of direct preparation for life; and on the other, those most essential to mental development. Since the particular point at which each useful detail should be introduced into the course of study is determined by immediacy of usefulness rather than by readiness of mastery due to biological conditions or vain effort at academic completeness, such organization will be pedagogical rather than biological or logical.

After all, it is this building-up of an essential pedagogical system that is the most significant and prophetic result of a test of relative worth. When the subject-matter most highly useful not only for citizenship, morality, and other specific phases of the educational aim, but for general mental development, has once been determined and a system of relationships, as specific and complex as mathematics or the sciences, has been built up, education for the first time in the history of civilization will have become truly and usefully formal, and an ideal state undreamed of by humanist or Greek, made possible thru the gradual development of scientific practice in the school.

ROUND TABLES

ROUND TABLE OF SUPERINTENDENTS OF LARGER CITIES

HOW TO MEASURE THE EFFICIENCY OF TEACHERS

I. WILLIAM M. DAVIDSON, SUPERINTENDENT OF SCHOOLS, WASHINGTON, D.C.

I am asked to indicate a solution of the problem of "How to Measure the Efficiency of Teachers" in the school systems of the larger cities.

This problem resolves itself upon inspection into three elements: (1) In definite terms, what do we mean by the efficiency of a teacher? (2) What effects upon the teaching corps may we legitimately seek to produce by our system of rating? (3) With answers to these questions in mind, precisely what system should we devise for the official measurement and record of the efficiency of our teachers?

I. WHAT DO WE MEAN BY THE EFFICIENCY OF A TEACHER?

When we speak of the efficiency of a teacher, we think (*a*) of the effects which are wrought upon the pupils of the class by means of the teacher, or (*b*) of the multifarious qualities in the teacher which enable him to bring about such effects. It is obvious that, as the tree is to be judged by its fruits, so the teacher is to be judged by the effects he produces in the pupils of his class. When we note the absence of a given effect (as, for example, the proper growth of the pupils in power of clear and vivid expression in language), we tend to explain the fact by reference to the absence of some quality in the teacher. If the appropriate quality is observable in the teacher, the absence of the effect may possibly be explained by the special character of the pupils or the inadequacy of some former teacher.

The effects of the teacher's qualities upon the pupils may be outstanding; but they may be so subtle as to escape hasty inexpert inspection. Effects upon the literary taste of the pupils or upon their attitude toward problems of conduct, for example, are far more subtle than effects upon their accuracy in spelling or upon their facility in routine arithmetical processes. The teacher who is successful in producing the subtler effects upon the mind and character of the pupils, a good critic would promptly concede to be a better teacher than he who is successful merely in producing the more superficial tho more outstanding effects. The poor critic judges by the grosser effects; but the wiser critic need not neglect to place a due valuation upon the pupils' growth in correct spelling and prompt calculation.

It sometimes happens that the supervisor tends to ascribe to the qualities of the teacher effects which are simply due to the increasing maturity and out-of-school experience of the pupils. The qualities observable in the teacher should serve as a check upon this fallacy.

But at the same time it must be remembered that the efficiency of the teacher consists essentially in the effects produced by his instrumentality upon the pupils of the class. This is the substance of the matter. One must be careful in making inferences from the qualities he thinks he discovers in the teacher to the effects that may or may not be actually produced upon the class or really be traceable to the teacher. The lay critic tends to place too high a valuation upon the personal manner of the teacher toward himself or during his presence in the class. The professional critic checks the teacher's demeanor by a more guarded and searching observation, and is not misled by the vivacity which some teachers assume like a loose garment when the visitor enters and take off promptly when he departs.

Remembering the status of the pupils when the teacher took them in hand, the professional critic tries to estimate such part of their growth in knowledge, in power to

observe and infer, in appreciation, in power to express, and in conduct and character, as may legitimately be traceable to the instrumentality of the teacher. In things of this nature the teacher's efficiency consists. But the task of the professional critic is obviously most delicate, most difficult.

II. WHAT EFFECTS UPON THE TEACHERS MAY WE LEGITIMATELY SEEK TO PRODUCE BY OUR SYSTEM OF RATING?

The worth of a system of rating is to be determined not merely in terms of its accuracy in stating the facts, but almost as importantly in terms of its tendency to improve the quality of the teachers rated. Given a teacher with pride in his professional standing or, what is better, ambition to increase his serviceableness to the children, a rating which reveals some deficiency, considerately, is an incentive to self-improvement. *Considerately*, I say, for inconsiderate criticism tends to wound and discourage the most sensitive of professional servants. Given a teacher with no particular pride or ambition, the rating serves as a warning and in some cases as an awakening. Given a teacher with inadequate academic and professional preparation for the service, the rating serves to set a standard toward which he will strive, if not already professionally dead. Given a teacher who is inclined to be negligent of the necessary class and school routine or lacking in the spirit of co-operation, the rating may have the arousing effect of a dash of cold water; of course, the water should not be too cold and immersion in it should not be too long! Criticisms and ratings cannot effect the impossible; they cannot re-create the teacher. But much they may do in the direction of stimulating cultural and professional growth.

III. PRECISELY WHAT SYSTEM SHOULD WE DEVISE FOR THE OFFICIAL MEASUREMENT AND RECORD OF THE EFFICIENCY OF OUR TEACHERS?

When we come to the actual task of devising a system of ratings, we come upon a series of problems with which city superintendents everywhere are familiar.

Of what items should the rating blank take account? I should say that too many items tend to distraction and that too few fail in adequacy of information. Here, as in other administrative matters, the doctrine of the golden mean applies. I have recently made some study of a rating blank which contains twenty-nine items. The items are wisely chosen. But I believe that all necessary information can be conveyed with fewer items. On the blank in question there is provision for the *specialties*—music, drawing, and physical training; for three *major items*—instructing, controlling, educating; and for a *total rating* of the teacher. Under "Instructing" there are eight subheads; under "Controlling," six; and under "Educating," eight.

A recent contributor to the *Educational Review* offers a teachers' rating blank in which fifteen items are grouped under "Teaching Efficiency," two under "Scholarship," eight under "Effort," six under "Personality," and seven under "Control of Class." To make a rating under each item upon this blank is not considered requisite or, I judge, usual. The many items are intended to serve not only as convenient categories in which to record the critic's impressions as they come along but also as reminders of what he is to look for.

"It is difficult," as a prominent superintendent has pointed out in a valuable paper on "The Basis of Grading Teachers' Salaries," "to protect the school . . . . (when estimates of the efficiency of teachers are expressed in percentages) on account of the inclination of supervising officers to escape trouble by boosting the marks. According to the *Brooklyn Eagle* a few years ago, the marks of over 90 per cent of the teachers of one of our large cities were over 90 per cent. In another city, at the end of five years, in marking for promotion, it was found that 96 and a fraction per cent of the teachers were marked so high as to entitle them to promotion. It is evident that these estimates had ceased to properly discriminate between the degrees of efficiency of teachers." It is my own impression that for some reason or other literal ratings do not offer quite as much incentive

to this vicious boosting of marks as percentage ratings. On the rating blank to which I referred a moment ago, for each of the twenty-nine items any one of sixteen marks may be given; I should certainly reduce the number of marks to, say, five. These five might be: excellent, very good, good, fair, and poor. A teacher rated "Fair" in a given item should be considered just above the danger line; that teacher should "stop, look, listen." A teacher rated "Poor" should be considered liable to reduction or dismissal, ample notice having been given.

Should the rating be given annually? My own experience is that a rating regularly given in the middle of the year tends to produce unrest among the teachers, and, in some cases, a bitterness that is demoralizing. A confidential rating of teachers at or below the danger line might, perhaps, be given in the middle of the year to advise the higher school officials of the teachers whose work stands in need of specially helpful supervision. But in general I should say that one annual rating given in May or June is sufficient. This rating should, of course, be open to the inspection of the teachers affected. And, let it be said, the supervision should be conducted so honestly, intelligently, and helpfully that no teacher should be astonished at the rating he receives.

By whom should the rating be given? I should say by the principal. The point is that the person who is officially responsible for the rating should be thoroly familiar, by reason of very frequent observation on the ground, with the work of the teacher rated. The rating blank offered by the contributor to the *Educational Review* (hereinbefore mentioned) is intended for use by the district superintendent himself, the principal's ratings to serve as a check upon the superintendent's impressions and conclusions. When it is remembered that this particular district superintendent has charge of twenty-five schools, a number of which have seventy or more classes each, it is obvious that this task of his alone is tremendous. He can visit each one of his nine hundred classes about once a year; certainly not more than twice each year. That he should make and keep a systematic record of his impressions, there can be no doubt. Nor can there be any doubt that before this record is filed, it should be submitted to the principal for consideration and for comment. But I am firmly persuaded that the basic ratings should be those of the several principals in charge. The principal's ratings will, of course, tend to err in the direction of leniency, and the record kept by the district superintendent, who is in less intimate personal contact with the teachers rated, may serve a valuable purpose in discounting this tendency. I would, however, use the general officer's ratings merely as a check upon the basic ratings for which the principal is held responsible.

Shall all teachers be rated annually or only those near, at, or below the danger line? I am inclined to think that where the promotional system permits, teachers whose work is undoubtedly satisfactory need not be rated on the blank. The successful teachers may be helped quite as effectively and with less friction by personal conference with the supervisors. Again and again I have seen promising teachers embittered and discouraged by a too cold-blooded rating.

Shall high- and normal-school teachers be exempted from the annual rating? It has been urged that the same reasons for not applying a system of efficiency ratings to college professors should apply with slightly diminished force to the case of high- and normal-school teachers. But the unfortunate truth is that our high- and normal-school teachers in too many cases are ill-trained for their profession or ill-adapted by temperament or dominant interests to its pursuit. And so, where the high- or normal-school teachers are more in number than a handful, a system of ratings at least for those bordering upon "unsatisfactory" might well be used.

High- and normal-school teachers should, of course, all have at least the first degree in arts or sciences—the tendency is toward the second degree as a requirement. I wish that all elementary-school principals could meet the same requirement. In the case of the elementary-school teachers in the service who attain the first degree in colleges of good standing, some special recognition should be made in the promotional system, provided

their classroom work is good. Such recognition may serve as a proper incentive to their colleagues.

Some cities have had a more or less doleful experience with promotional examinations. When the examinations obviously lack the approval and moral support of the great body of the teachers, they should undoubtedly be abandoned. Otherwise, they may prove a source of much good particularly in school systems whose teachers have been inadequately educated and trained. An intelligently devised examination may disclose serious interests in various fields by simply calling for knowledge; it may test power of expression. The examination should serve to supplement the efficiency rating by permitting the improvement of the teacher, as measured in terms of scholarship, to receive a recognition which the routine ratings tend to reduce to low, if not the lowest, terms. Thus, the promotional examination may serve as an incentive to the teaching corps not to rely for self-improvement exclusively upon their teaching experience but to continue to be learners at the feet of wiser teachers than themselves. It is well for the teacher of children to be at the same time an active student in some field of knowledge; his studies will keep alive within him a penetrating sympathy with the difficulties of the learning mind. Classroom efficiency must for obvious reasons outweigh, decidedly, examination efficiency as a factor in determining the teacher's promotion.

Far better, however, than any showing a teacher may make in a promotional examination is his attainment of a degree in arts or sciences in a college of high repute which actually lives up to its repute! And this vital contrast must be duly recognized in the promotional system. That the functions of the city normal school be extended to the cultural and professional improvement of teachers in the service is a proposition worthy of the earnest consideration of educational administrators; much depends, of course, upon the accessibility and character of other institutions. At any rate let the college graduate be attracted to the elementary school, and let teachers in the service be encouraged to secure a more thoro and extended academic education and technical training.

The motive for the cultural and professional improvement of the teacher in the service should certainly not be commercial, for teaching is a ministry rather than a trade. At the same time, I conceive it to be administratively wise in a large system of schools for the efficiency rating to exercise a distinct effect upon the teachers' salaries. My thought is that the same basic salary might be given to all elementary-school teachers and a higher basic salary to teachers of the high-school grades; and a still higher basic salary to the normal-school teachers. Upon each basic salary there should be provision for slight and regular increases each year for not more than, say, five years on account of length of service; and for larger increases on account of efficiency, during a much longer period than five years, until a reasonable maximum is reached. Under these circumstances, a proper relation would obtain between salary and efficiency. The community should pay the teacher for service rendered rather than for mere longevity.

When the efficiency rating affects remuneration, the question of ratings acquires a special importance. Cases will necessarily arise in which a teacher conceives the rating given to be unjust. In such cases, appeals for revision should always be permitted and such appeals should be welcomed rather than looked upon with disfavor. The revision should be effected by the superintendent of schools or by a small professional board of supervision after personal observation of the teacher's work.

Many a teacher would have the promotional system made automatic. But the merit system is not necessarily automatic. There should be reserved to the superintendent of schools a certain margin of discretion. In so personal a ministry as teaching, the recognition of the personality of the teacher is fundamental. The superintendent of schools should at any time have a right to select from a given group of teachers rated "Excellent" that one whom he for good reason may deem worthy of the promotion. There need be no fear that the merit system will ever suffer damage from the responsible head of the schools. If a superintendent cannot pick out a teacher of rare promise almost intuitively,

he is no superintendent at all. The school system will profit much when thru the superintendent's personal intervention, if need be, a career is kept wide open to the most talented. The personal judgment of a first-class superintendent, in those cases where it is based upon first-hand knowledge, will almost invariably prove more significant than the automatic working of the promotional system.

In no profession are physical vigor, and that contagious buoyancy of spirit which seems so closely correlated with vigorous health more important than in the profession of teaching. A sound nervous system, particularly, is nowhere more vital to happiness and service. Now, when a teacher's work suffers gravely from any physical disability, the school authorities are, of course, charged with the duty of seeing that he promptly takes a leave of absence for his own sake as well as for the sake of his class. But, where the temporary impairment of efficiency is not grave and may with fairness to the children be tolerated, the rating official should not rate the teacher at all for the school year in question. This proviso I would make in order to spare the officer the very human temptation of reporting a rating that blinks the facts. Such a proviso tends to emphasize the fundamental fact that it must be a point of professional honor with the rating officer to make his rating accurately express his sincere and well-grounded convictions.

Finally, I am of opinion that the promotional list of a given grade of teachers should comprehend not merely all the teachers in a given district but all the teachers of the city. The whole system should be operated as one unit. This means that the rating should be standardized. Such standardization is promoted by frequent counsel among principals, supervisors, and superintendents; it may be officially established by a small board of supervision.

II. BEN BLEWETT, SUPERINTENDENT OF INSTRUCTION, ST. LOUIS, MO.

In discussing this topic, we may properly regard the discussion as being based upon several assumptions which are admittedly well grounded. The first of these is that there is a possibility of measuring such efficiency; second, that there can be no correct or adequate measure of such efficiency unless the one who measures has a clear conception of the nature of that which is to be measured; third, it assumes that the one making the estimate shall have in his possession correct and adequate standards of measure; fourth, it assumes that the measurer, thru his training and experience, has become competent to apply such standards of measure to the things to be measured which, by their very nature, are many of them intangible; fifth, it assumes that he will be as honest and unprejudiced in his estimates as it is possible for a human being to be.

Starting with these assumptions as admittedly proper and fundamental, a mode of procedure may be easily outlined. The teacher should be estimated before he enters the work and when in the work. Before he enters the work there should be ascertained: first, his scholastic preparation for it, and, second, his probable aptitude for the work as shown in his personality and in his interest.

Whether he has the equipment in scholarship for his work can be better ascertained by the record of his student life rather than thru examinations. It is necessary that the one who shall pass upon such a question shall be able to judge correctly the value of reports made by the schools or school officials. The testimonial that bears upon its face the evidence of careless or extravagant praise, as well as the one which does not regard the promise of development expressed in the attempts already made or the things already accomplished, should be of little influence in the estimate of probable worth. The judge of the probable influence of his personality in the schoolroom will require the experience, skill, and insight suggested in the assumptions upon which this discussion is based. He must be able to read in the candidate's appearance and conversation the mind and heart that show themselves thru these outward manifestations. To determine whether he is entering the profession because of his interest in the field of work it offers,

or whether it is to be merely a temporary occupation used as a stepping-stone to some other work, is evidently a necessary element in considering his probable efficiency in the work. If he wishes to enter the profession as a makeshift, it may be quite safely assumed that he will not reach a high degree of efficiency in it.

The teacher when in the work should be estimated by what *he does*, and by what *he is*. The estimate of what he does should have regard, first, to his conception of the aim of the work as a whole; and, second, to his adaptation of means to accomplish this aim. If he is found to have a faulty conception of the whole work of education, the conviction cannot be escaped that he is certain to be inefficient. For instance: Should his notion of the function of geography in the curriculum be that it instructs the the pupils upon location of certain political or physical features of the map without relation to the life of the child, it is evident that he will misinform rather than inform and stimulate the pupil. If he is found to be correct in his theory; if, theoretically, he regards the school as the place for informing and developing the child, and is still unskillful in the adaptation of the various appliances and means at his disposal for accomplishing this purpose, his correct theory is rendered useless by his lack of skill in the selection of means to accomplish his ends. What the teacher does, as manifested in his handling of the curriculum and its related parts, is quite certainly but a manifestation of what he himself is. These things are but evident manifestations of his manner of thinking, his emotional nature, his capacity for enjoyment, and his strength of will. His tendencies and habits in intellectual and emotional life are sure indices of his efficiency, and his modes of thinking, feeling, enjoying, and willing are certain indices of his worth.

If the one who is responsible for making report upon the efficiency of a teacher will take into his consideration these things that I have set forth, he need not concern himself about more minute scales. Without fear of doing injustice either to the school or to the teacher, he may, in a large measure, ignore such questions as the percentages which the teacher's classes make on certain examinations in the subjects of the course of study, if he has satisfactory evidence that the teacher has the proper conception of the purpose of these different subjects in the whole scheme of education, and in his own life in the schoolroom evidences his capacity and habit for right thinking and right acting. It is these larger results that must be considered as the rational measure of efficiency. It should be kept distinctly and constantly in mind that the qualities which distinguish successful teachers from tyros or misfits stand out in bold relief and cannot be overlooked or mistaken by one who is an experienced educator. For instance, there will be no difficulty in discovering the teachers whose whole schoolroom influence stimulates the development of the nobler aspirations in the child; but there will be great difficulty in analyzing into the different and differing elements such power as is manifested in different teachers. Too frequently the measurer uses a micrometer screw where he should use a field glass.

This should be the method of measuring, and its record should be in accord. On whatever qualities the measurer wishes to report, the record should be on a large scale or classification and not by percentages. In other words, it should be reported as "Excellent," "Good," etc., and not as "95 per cent," "75 per cent," etc. Nor is it fair to let this estimate go unrecorded. It cannot be carried in the memory of anyone and, if it could, the changing conditions of the work take out of it frequently the one who has made the estimate. To be fair, there should be a written record kept and, in a large system of schools, the value of the symbols used in making this record should be standardized as far as human care can standardize it in order that the symbols may mean the same thing from whatever school they come, and to all consulting them.

The measurer in his work of estimating should set up for himself the same standard that he uses on the one he is measuring. He should be competent along the lines of competency he expects in the assistant. The littlenesses that he would condemn in the teacher he should be himself far above.

After the standing of the teacher has been determined, he is not only entitled to know this estimate, but he should be informed of it in such manner that he may profit by it if he is capable and worthy. Sometimes there is hesitancy about even letting a teacher know what the estimate of his work is. This is neither fair nor is it good business.

DIFFERENTIATION IN THE COURSES OF STUDY FOR CHILDREN BETWEEN TWELVE AND SIXTEEN YEARS OF AGE

S. L. HEETER, SUPERINTENDENT OF SCHOOLS, PITTSBURGH, PA.

This is an administrative body, a round table of school superintendents of cities of the first class, a body of men and women interested in the executive work of public education in our larger cities. I desire to continue this discussion in a very informal way, and wholly from the administrative point of view. It is not the theory of differentiation that I would emphasize, but the practice. There are many theories that call for differentiation in our elementary-school courses—educational, social, industrial, economic, and civic. These have been presented from time to time on educational platforms in convincing arguments.

What we need in a meeting like this is not theory, but a statement of executive, administrative experience—a statement of things actually done by men and women at work. It is this that should give value to a round-table discussion of this character.

I have been called within a year to a city school system undergoing reconstruction and probably confronting school authorities with as many administrative problems within the scope of one year as have ever been presented in the same time in any American city. And it has been suggested to me that a brief review of the year with special reference to the effort of the board of education of Pittsburgh to break down the single, traditional, grammar-school course, and to extend differentiated forms of training to the children of the city would give perspective to the subject before us.

The schools of Pittsburgh were, until a year ago, administered by sixty-one school boards, one board of six members in each ward, elected by the people, given unlimited power to select its own teachers, levy taxes, borrow money on notes, issue bonds, employ architects and contractors, construct school buildings, act as their own accountants, and make no reports to the people.

Little independent systems of schools grew up in some sections of the city, so vicious, so pernicious in their methods that the people of Pennsylvania came to the support of the good people of Pittsburgh, and two years ago school laws of Pennsylvania were enacted in the form of a new code that has proved to be the most practical and comprehensive piece of school legislation ever framed in any American commonwealth. Under its provisions local ward boards in cities of the first class in this state were abolished, and a new central board of fifteen was authorized and appointed by the judges of the Courts of Common Pleas. This legislation has been followed by an educational awakening thruout the state and especially in Pittsburgh, where the people with considerable unanimity demanded a new board of education constituted of the most responsible and influential men and women of the city, men and women experienced in big business and public affairs; and the same people are now supporting a program of reorganization and reconstruction such as has never before been undertaken in the same time in this country. No one individual, nor group of individuals can lay claim to the credit for a remarkable year of educational progress. It means merely that a half-million people, interested in the education of their children, demanded the abolition of an old order of things, and the establishment of a new.

A year ago ward lines served as barriers between school districts. Empty buildings stood in some wards and congested ones across the street in others. Twenty-room buildings were found with an average of 70 children to a teacher; many individual school-rooms enrolled as high as 80 and 90, and, in one instance, 136 children to one teacher.

Here was a system of schools, or rather the lack of a system, where educational progress was clogged. Primary pupils, 60, 70, and 80 to the room, were being required to remain in the second or third year in first-year work; children in all the lower grades were being habitually schooled in habits of failure, and thousands were found in the fourth, fifth, and sixth grades at the ages of fourteen, fifteen, and sixteen years, overaged and overgrown, behind grade, unable to proceed farther, holding a dislike for school, threatening truancy, and applying for labor certificates, leaving the schools in too large numbers with only the rudiments of an education, and running up and down the city streets looking for jobs. You will understand that I am describing a system with a full knowledge of the fact that there were a number of exceptional, high-grade schools and many excellent teachers and principals. It is the system that I would discredit without reflecting upon individual teachers and schools that did good work in spite of the system.

The new board of education abolished ward lines, established new school districts, redistributed the entire school population, equalized attendance, filled up empty buildings, relieved others, and issued an order that no principal under any circumstances would be permitted to enroll more than 50 children to a teacher; they employed teachers on the basis of one for every 35 pupils in the grammar schools, and one for every 40 in the lower grades; opened up forty empty rooms; placed seventy rooms of children on one-half-day sessions; purchased fifty portable schoolrooms; and assigned additional teachers with the idea of normalizing school attendance. To my mind, ladies and gentlemen, here is the first step toward securing efficiency in public education, a step that precedes even differentiation in courses of study, and that is one that provides adequate schoolroom accommodations, and gives each teacher a decent and respectable number of children.

The new Pittsburgh board of education further established a system of semiannual and individual promotions thruout the entire district, regraded all the children in the public schools on a half-year basis, and secured the volunteer services of one hundred teachers during the first summer vacation to simplify the course of study so as to permit a larger proportion of school children to complete the year's work in a year's time. And here, to my mind, is the second step anticipating differentiated courses—simplification before differentiation, reducing the subject-matter in each of the subjects in our elementary-school curriculum to a point where only things essential and fundamental shall be emphasized, giving to all the children alike in the first six grades a broad, yet basic training.

THE UNGRADED ROOM

As a third step preparing the way for differentiated courses in the elementary schools, sixty teachers have been appointed within one year to do ungraded work. One teacher is assigned in each building of twelve rooms or more to give her entire time assisting children back into their classes. Here is a special definition of the aims and purposes of the ungraded room in Pittsburgh. It is to provide special, individual help merely to those pupils who may be gotten back into normal standing in their classes. It is not a room for the imbecile, nor the mentally defective, the consumptive, nor the moron, but rather it is a room for the normal child, one who, for one reason or another is slow, or behind in one subject or more, who can be encouraged and strengthened in his regular work by extra help. It is also a room for the supernormal or bright child who desires to do outside work for a special promotion. Provide special assistant teachers for the large number of children in our schools who are a little slow to learn or a little backward in studies and there will be less need of differentiation.

SCHOOLS FOR THE WEAK-MINDED

Nine thousand dollars has been appropriated for the current year to establish and maintain three different schools for mental defectives, to be geographically distributed and to admit only such children as are of such a low grade of mentality as to require a school program entirely different from that of the ordinary schoolroom. Segregate the weak-

minded children, the institutional cases, from the regular schoolroom, and you will reduce the need for other forms of differentiated courses of training and instruction.

THE FOREIGN CHILD

Three special schools, geographically distributed, have also been organized for foreign children, and a number of teachers have been employed to meet each week in special centers with children with defective speech. Remove from the regular schoolrooms the adult foreign children that have been assigned usually to the kindergarten and primary schools until they could learn the language; also assist stutterers and stammerers, and you will remove drags on the educational system.

OPEN-AIR SCHOOLS

The chief medical inspector, with his thirty assistants, has been working for two months overtime after school hours and on Saturdays in a special examination of school children of the city, covering all suspected cases of tuberculosis. This examination has been thoroly and scientifically conducted and always in the presence of the parents. The medical inspector has just made his report and has presented to the board of education the names of 125 children suffering from active tuberculosis, and the names of 400 others, who are predisposed to the same disease.

The board has just taken action, providing for two types of schools to accommodate these two classes of children. First: five open-air schools with suitable rest-rooms, lunch-rooms, medical rooms, etc., for those who are actively tubercular; these schools are being located in portable school buildings, two buildings to each of the five centers. Second: open-window rooms or low-temperature rooms are being set aside in ten different school buildings of the city, to which will be admitted the anemic and the physically subnormal child predisposed to tuberculosis.

ELEMENTARY INDUSTRIAL SCHOOLS

There will always be in every city system a large number of boys and girls, fourteen, fifteen, and sixteen years of age in the intermediate and lower grammar grades, children who are scheduled either by circumstances or choice to leave the schools and go to work, who will not and cannot go to high school, who do not look forward to the professions but to the occupations and industries. They are not the pupils who should be placed in ungraded rooms with the thought of getting them back into the regular class standing; they are not unfortunates, who should be assigned to the schools for the weak-minded; they are not necessarily the tubercular children. They are, as a rule, the motor-minded, possibly overaged and overgrown boys and girls, who leave the public schools regularly before completing a common-school education to enter industrial and commercial pursuits.

As a beginning, in the way of providing a differentiated course of training and instruction for this type of child, the board of education in Pittsburgh has recently set aside two fourteen-room buildings to be used as elementary industrial schools. These buildings have been equipped since September with woodshops, printing-offices, bookbinderies, electrical construction rooms, sheet-metal shops, mechanical-drawing rooms for boys, cooking and sewing centers, and millinery shops for the girls, gymnasiums, swimming-pools, shower baths, etc., for both boys and girls.

Pupils over fourteen years of age are admitted in all parts of the city to a six-hour-a-day school program, where they spend one-half of each day in the school shops; one and one-half hours in simplified book courses; three hours in the shops; and one and one-half hours in the gymnasium and shower bath. The boys in this school have just petitioned that the shops be kept open on Saturday, and letters have been received from some of the principals, requesting that the boys enrolled in the regular schools during the week be permitted to spend all day Saturday in these special schools.

Here is a suggestion that might well be applied to all the forty manual-training and household arts centers in the city, and that is to keep them open all day Saturday for the

boys and girls who attend the regular schools during the week, and receive manual training but one-half day. Provide special vocational or prevocational courses for more children in our elementary schools, and there will be less need for other forms of differentiated courses.

COMPULSORY ATTENDANCE, CHILD LABOR, AND VOCATIONAL GUIDANCE

The director of compulsory attendance has been assigned offices in the elementary schools above named. His thirty assistants, truant officers, report to him regularly, and thus the truants of the city are brought in direct, personal touch with the elementary and industrial schools. No child can be given a labor certificate without making a personal visit to the attendance officer in the elementary industrial schools. Every such child at the time of his visit is made a guest. He is shown about the buildings, thru the shops, and the value of a year or more of special vocational training is placed before him.

Further than this, the board of education has just appropriated $5,000.00 for vocational guidance. The newly appointed director has also been assigned offices in the elementary industrial schools. It will be largely the function of this department to ascertain the circumstances of the homes of children applying for labor certificates, and to inquire into the conditions under which these children propose to work; to take an industrial survey of the different occupations and vocations of the city; and to have them printed in pamphlet form and placed with explanations in the hands of the children. There is a new responsibility placed upon public education, not only of training the adolescent boy or girl in industrial processes, but in providing counsel and guidance to every youngster that stops school to enter the fields of labor. Child labor presupposes both vocational guidance and vocational training.

I have the feeling that when we assign the reasonable number of children to each teacher; reduce our course of study to a minimum basis, establishing ungraded rooms to coach backward children; provide special schools for the mentally defective; take care of our foreign children in separate rooms; maintain open-air schools for the anemic and tubercular; and provide vocational courses for the larger number in all elementary schools, who are determined to go early to work, that the work of the compulsory attendance department will be greatly reduced, and that the problem of truancy will partly disappear. It is a question of differentiating our courses of training to meet the needs of the varying types of children in our schools.

THE HIGH SCHOOLS

It is not only in the elementary schools. Too large a proportion of children graduating from the eighth grades have left school permanently. The board of education of Pittsburgh is now maintaining the beginning of nine high schools organized as district and cosmopolitan high schools. These schools are located according to the topography of the city and established in every district where attendance warrants the same. Four of these schools have opened since September. A recent three-million-dollar bond issue looks toward the simultaneous construction of four modern high-school buildings. The old-time academic and college-preparatory courses have been supplemented by differentiated courses, industrial, commercial, vocational, technical, art, etc. Just as much credit is given to the pupil pursuing music, freehand drawing, or crafts, or household economics, or manual training, as to the pupil pursuing algebra or Latin. As a result, the high-school enrollment in four months has increased 50 per cent and bids fair to double by September of next year. *It is only a question of providing schools for the people's children.*

THE SHORT-COURSE HIGH SCHOOL

Recognizing the fact that the business college has thrived in the past upon those eighth-grade graduates who could not afford to take the four years' high-school commercial course, the new board of education in Pittsburgh founded in September in a partially empty grade-school building a two-year, short-course commercial high school, offering

only the essentially commercial subjects. Three hundred pupils were enrolled the first half-year in this school and investigation shows that 90 per cent of this entire enrollment would have been lost to the public schools had not this special school been opened.

I realize in giving this review of a year's development in Pittsburgh, that I am not proposing things new to many other cities. These types of special schools have been pretty well established in thoroly organized systems, but they were new to us. Our year of progress may be measured quite largely by our effort to provide separate schools with separate forms of training to meet the separate needs of separate types of children. This is our idea of differentiation of courses for children over twelve years of age.

Let me say in closing that I believe strongly in a single, basic, minimum, uniform course for children who are finally left in regular schoolrooms. I believe in a basic course and reasonable uniformity. I have seen the effects of a lack of uniformity, the results in sixty-one self-governing, locally adjusted, independent school systems—a development of a hundred years. You can't preach local interests, community adaptation, individual liberty, and rights of teachers and principals to me. No uniformity means no unity; no unity means no organization; no organization means disruption. I look with alarm on the disposition of educational theorists to enter this department, and clamor for decentralized control and administration of schools. There are certain fundamental basic principles that must be observed in all efficient school management even to the formulation of courses of study and the presentation of subject-matter, and all efforts to differentiate, to adapt to local and individual needs, should not break down uniformity in fundamental things.

ROUND TABLE OF SUPERINTENDENTS OF SMALLER CITIES

TOPIC: THE MOST EFFICIENT SERVICE WHICH ASSISTANT SUPERINTENDENTS OR SUPERVISORS CAN RENDER

A. THE RELATION OF SUPERVISORY ASSISTANTS TO THE SUPERINTENDENT

I. MILTON C. POTTER, SUPERINTENDENT OF SCHOOLS, ST. PAUL, MINN.

Supervisory assistants are of various species. One must differentiate.

Supervisors of special subjects can safely bear no general administrative duties. The supervisor of sewing, or penmanship, or music, or drawing, or physical culture presumably teaches, or once taught those subjects better than others—which affords no argument for making one of them your administrative partner outside his own speciality.

A table prepared after returning some of her reports the second time for verification was handed me by Miss Alice Dinsmoor, supervisor of drawing, at Butte, Mont. It indicates a marvelous variation of service inside the special field. Salaries ranged from $2,700.00 paid at Los Angeles well down to the $1,000.00 mark. The time per week given to drawing varied from 150 minutes to 60 minutes. The number of lessons per week in each room varied from 5 to 1. The number of meetings per year for each grade of teachers varied from 10 to 1. The average number of visits made by supervisors each month varied from 240 to 0. The number of lessons taught personally by supervisors each month varied from 150 to "occasionally." It seems that few of the supervisors formally participated in arriving at final judgments upon the election or retention of teachers. Most of the supervisors, apparently, could find plenty to do without leaving their specialty.

I can imagine few more fertile fields for cultivating misunderstandings than that of the erstwhile special teacher, recently relieved of teaching duties and dubbed supervisor, when his or her recommendations outside the special subject are accepted as those of an assistant superintendent. The heartaches and tears of the room teachers will some-

times curdle into hatred and small conspiracies if these specialists are even thought to have decisive influence concerning teachers with the superintendent.

There are none of us here, I fancy, who are too young to have known the advent of the special teacher. It was not in that connection or at that time argued that departmental teaching in the grades must supplant the general practice of room teaching. No, the special subject would be specially taught only as a passing convenience to the untrained room teachers, and as a temporary expedient of the superintendent. So soon as the majority of room teachers should be properly equipped in the new subject there would be no further need of the specialist. And the training schools cheerfully set about to teach teachers who should read music, etc., as naturally as they would English print. Today the second generation of children specially educated in these specialties thru fourteen or sixteen years of school life find themselves as teachers more specially supervised than were their predecessors of the last century. The only hope for the youngster to acquire one of these delectable specialties is still for the superintendent to engage a specialist, no longer to teach the specialty, but to teach the teacher to teach it. This temporary scheme for "training in service" may be expected to fulfill its temporary purpose and permanently depart, about the time the Civil War pension and the Civil War tariff shall complete the purely temporary purposes for which they were devised. Meanwhile, many a special supervisor has made himself, or been made, a kind of superintendent.

To be true to his own history it is important that while the critical functions of the subject supervisor should not be minimized, he should not forget or neglect his prime purpose as a model teacher. In these capacities, supervisors of the more recent school subjects will probably be necessary beyond our lifetime.

Just because the inartistic, ungymnastic, or non-musical, have so many of them been criminally if not foolishly certificated by colleges and normal schools each year to teach school, there is still considerable teaching which might well continue to be done by special teachers if it is to be done well at all. A large moiety of our room teachers seem still quite lacking in artistic temperament or skill. But to put these unfortunate creatures into the hands of a taskmaster who demands specially colored straw in every tale of bricks, when the poor driven things can't tell straw from papyrus reeds, and have their whole interest centered on the essential fleshpots anyway, will scarcely fit the artmaster's mind or feelings for generous participation in the really catholic or sympathetic administration of diverse interests.

True, one must secure the specialist's judgment on each teacher at one time or another. One must recognize the just claims of each study specialty. But in these days of extreme subdivision of labor in adult life, we are somewhat likely to be subjected to bullying at the hands of the devotees of some special subject who consider it the *sine qua non* of education. It is the business of a general superintendent of schools jealously to defend a general liberal education for children against the inevitable attacks of special supervisors who so naturally try to monopolize most of the general teachers' time and energy in teaching and worrying about their special subjects. If he expects strong supervisors to be strong in their special fields, he must be equally so in the general field.

In the American city of 200,000 souls, more or less, it is all too common to see these specialists pressing or pressed forward into assistant superintendencies, thereby greatly inhancing the difficulties of the superintendent and supervising principals in curbing the natural tendency of specialists to overdo their own specialties, as a part of any general education. There are several cases of special supervisors, with special equipment and experience, being made assistant superintendents with incidental general functions while continuing those of the subject supervisor.

There are presumably some specialists without the special mental habits of their class and to that extent perhaps not the most effective specialists. But the results of making over effective specialists into assistant superintendents seem generally to

have been quite perceptible in a prescriptive, uncatholic administration, arbitrarily enforcing various localized, unexpected, and non-related measures in the schools. The subject supervisor's greatest chance of service is generally confined to the subject supervised.

For careful, child-conserving, teacher-forming supervision, general supervisors, each of a distinct portion of the twelve years of public-school program, seem desirable in a town of more than a few thousand school children. A general supervisor's annual or occasional reports to the superintendent on teacher efficiency are quite as helpful as a principal's. He has a wider basis of present comparison than any building principal could or should command. While such a general supervisor, as of the grammar or primary grades, may frequently well be given the authority of an assistant in field supervision, at other times and places it has happened that a multiplication of superintendents has confused the teachers and complicated the direct relations of the principals to the superintendent. The better, and the better paid, your general teachers, the less need usually for numerous and expensive administrative functionaries. "Administrationitis" has been diagnosed as dangerous. The inflammation of the supervisory nerve is closely allied to it.

In a city of the middle size it appears to me that a superintendent must usually consider his principals as his correct representatives in local administration, the real assistant superintendents. In 1899, speaking before this body, Superintendent Soldan said:

> There is no more important office in our whole school organization than that of the principal. Our whole system in its daily working is based on the idea that the principal is the one in whom the highest local authority is vested. Great authority is connected with duties correspondingly great.

In cities such as most of us in this room represent, professional field supervision is the best service the general superintendent can render; a discussion of which will be seen to be strictly within the limits of my subject. To hold a dragon guard over the gates where unfit teachers enter or are thrust in, is made to seem a sterner duty when you yourself are daily in the life-laboratory where incapacity mars so many little souls. To choose teachers skillfully from among the fully prepared and nobly endowed is easier to one who keeps among teachers. Even so, I carefully chose a man for special work one time, with an angel record and saintly face, only to find a hole in him big enough to throw my hat thru.

Field work, including the selection and assignment of teachers, is the superintendent's big job in the average city. And it is a big job. It is worthy of the best efforts of the first officer in your average school system. In the modern Babylons such work seems impossible. Organization problems, which are thought out on Saturdays and holidays in smaller places, must command most of the metropolitan superintendent's time. But human conservation ideas, I take it, would limit, even with him, the frequency and amount of new organization. Repeated reorganizations connote disorganization.

Too much tinkering with the machinery in the average schools sadly reduces the efficiency arising from continuity of method. In most towns it is not by innovations, discoveries, proclamations, or other newspaper leads which are so frequently generated in purely office administrations, but just by happy or patient living with the teachers and their little flocks, praising or correcting thru the days, that we earn an honest wage.

Such a superintendent remains a schoolmaster. He is not too anxious to excel as a business man or a politician. His schoolcraft will grow in skill, and will seem increasingly worthy of a devoted life, as he beholds it in actual application by his comrades in the ranks.

An office assistant is desirable for such a superintendent, one who will meet children and parents, agents and chance visitors, with genial grace but with precise reference to the sequential policy of the office. Such an assistant in charge of forms, records, inquiries, and general office administration, if a woman, can also prove a guide, philosopher, and friend to ambitious, misunderstood, or misunderstanding teachers, rendering thus the most efficient service to them and to the superintendent. In several cities of the Middle West one finds some such arrangement. The relation between the assistant and her chief is that of a lieutenant to a chief, and seems thoroly satisfactory in every case. Visitors always find the cheery assistant in the office and usually leave her presence happier than they came, whether they got just what they came for or not. If one would see the superintendent during school hours, he will find him in the schools.

As the growing school interests of the expanded city shall overtax the central supervisory organization, decentralization within certain general limits with greater local discretion in the hands of the principals, will perhaps be considered a safer remedy than establishing a bureaucracy. Then the superintendent may still do first-hand visiting, form first-hand judgments, and preserve a speaking acquaintance with the principals, who, when not loafers, and when not swamped in purely clerical operations, are vital assistant superintendents. In such an organization the principals are the district superintendents. The family relations which should exist between them and their chief, who is their general representative, have been elaborated in so many professional treatises that further discussion by me would be churning buttermilk.

II. J. J. KEYES, SUPERINTENDENT OF PUBLIC SCHOOLS, NASHVILLE, TENN.

In discussing the question of the relationship of the supervisor to the superintendent, I have no theories to advance, but can only relate the conditions as they exist in my own experience as a superintendent.

I have seven supervisors, some of whom have two or more assistants. Of the seven, four have charge of the special subjects, music, writing and drawing, domestic science, and manual training. The work of the other three is more clearly that of assistant superintendents. Two of them supervise work in the white grade schools; one, a woman, having charge of the first three grades, the other, a man, having charge of the grades from the fourth to the eighth inclusive. The third, a negro man, has charge of all the work in the negro grade schools.

The relationship of the supervisor to the superintendent is a twofold one: the attitude of the supervisor to the superintendent and the attitude of the superintendent to the supervisor.

The relationship on both sides should by all means be cordial and confidential. The supervisor in his relationship to the teacher is neither critic nor spy, but a general helper—a godfather. So in his relationship to the superintendent he is in no sense an informer, but is in the truest sense a confidential adviser.

When the school system has grown so large that the superintendent needs assistance in his own particular field, the problem of keeping in vital touch with the work and the army of workers is a most difficult and delicate one indeed. The supervisor must be the connecting link; in truth, he must be both thermometer and barometer, and woe to the superintendent when the instrument is of cheap construction, or for any reason untrue in its readings. The temperature of the corps is at all times of much importance to the superintendent, and who but the efficient supervisor can more correctly read it, as he moves daily among the workers, with here a word of encouragement and there a kindly suggestion, and always with a cheery, hopeful manner which gives inspiration to all? And again when trace of the brewing storm of some disaffected group appears on the horizon, or the

growing desire for some needed reform, or the increasing demand for some progressive step, who so quick to read the sign as the faithful sentinel, the supervisor? Fortunate, indeed, is the superintendent who has at his command just such a faithful steward. And the superintendent who stands aloof, monarch of all he surveys, but without such protection, must be strong indeed to escape defeat.

The selection of teachers from those in training and the promotion of teachers to more responsible positions are matters of serious import, and the advice and support of the conscientious, wide-awake supervisor is of untold value to the superintendent.

The efficiency of the teacher with respect to her power to instruct and discipline, her personal standing in the community, her attitude toward the school problems in general and her attitude toward her own particular problem—these are matters upon which the successful superintendent must be thoroly informed and this knowledge must come largely thru the efficient supervisor.

The selection of textbooks, where this is left to the individual city, is a laborious and responsible duty. The suitability of the text and its adaptability to local conditions is quite important and the supervisor is in a position to give expert advice along this line.

One of the most important duties of the superintendent is the formulating of the course of study. He may evolve a most beautiful scheme, embracing all the latest theories, but unless it fits the local conditions, it may be worse than useless. The supervisor, being in close touch with the daily work, not only reflects the attitude of the teacher, but becomes thoroly conversant with the strength and weaknesses of the course. He is therefore well prepared to suggest the changes necessary to make the course most efficient.

By keeping in close touch with the varied interests of the city at large, he is enabled to bring the schools, both teachers and pupils, into a more vital relation with the manufacturing and commercial development of the city. This has been done by prearranged visits of the teachers or pupils, or both, to industrial exhibits, electric light plants, gas plants, and other manufacturing plants, typical wholesale and retail stores along various lines, shipping-points, such as railroad terminals, steamboat landings, etc.

But what of the attitude of the superintendent to the supervisor? There must be no false conception of the relationship as that of master and servant. The superintendent and supervisor are partners in a most delicate and intricate organization. Patient and careful attention must be given to the supervisor in all his reports and suggestions, whether in the nature of complaints, problems to be investigated, or constructive measures to be tried. The supervisor should be made to feel at ease in approaching the superintendent, and opportunity for discussion of all these problems should be given. It is the painstaking duty of the superintendent to see that the teachers of the corps have the proper conception of the duties of the supervisor. It is so natural for the teachers, and especially the weak ones who need the most help, to look upon the supervisor as a faultfinder and talebearer. Unless there is a frank, harmonious feeling of partnership between teachers and supervisor, little good can be accomplished. This much-to-be-sought condition rests largely upon the relationship of the superintendent and supervisor.

B. HOW CAN SUPERVISORS AND ASSISTANT SUPERINTENDENTS RENDER THE MOST EFFICIENT SERVICE IN THEIR RELATIONS TO PRINCIPALS AND TEACHERS?

FREDERICK M. HUNTER, SUPERINTENDENT OF SCHOOLS, LINCOLN, NEBR.

The basis of the efficiency of the supervisor does not lie in any authority given him by the board of education, nor in any carefully planned system of supervision which he may devise, nor yet in the methods of instruction in which he may train his teachers. It is to be found rather in the supervisor's general conception of the function of the public schools, in the ideals which he holds for his own part in this work, in his judgment of

values or the comparative merit of school purposes and methods, in his knowledge of the needs of his own city, and each distinct community in it, and in his common-sense and practical ability in making his own department aid in meeting those needs. The supervisor's own personal calibre and his breadth of view determine what his relationship to his teachers and principals shall be, and how this can bring the maximum of efficiency. I shall attempt an answer to the question which this subject raises, if I attempt one at all, not in defining what sort of an organization shall be maintained, nor in suggesting what kind of rules for the government of supervisors and their relationship to teachers and principals should be laid down by the superintendent and the board of education, but in outlining what the supervisor himself should be and think, in suggesting some of the ends which he should accomplish, and possibly in intimating briefly some of the means he should use in attaining them.

In the first place, the supervisor's view of the responsibility of the modern day school system should be exceedingly broad. He must get away from the viewpoint of the mere specialist who seeks to develop in the pupils nothing but a mere proficiency in his particular subject. His viewpoint must cover the school system as a whole, and he must see what it aims to do for the boy and girl. This vision must not be dimmed by the glory of his own enthusiasm for his subject. True, he must see the importance of his own work in the economy of the whole school; he must believe in it, and be enthusiastic about what he can make it accomplish; but it should be written indelibly in his subconsciousness that his subject is subservient to the thing which the system as a whole is attempting. The school's place in caring for and developing the physical being of the boy and girl, its responsibility for their moral foundations, and its responsibility for their specialized preparation for industrial efficiency, in short, the whole social responsibility of the school, should give a definite trend to the habitual thinking of everyone who directs the work of the teachers of our children. The results of the work of the supervisor of art, or of domestic science, or of penmanship, for instance, are not to be measured in how well the child can draw, or cook, or even write, but rather, in how can an appreciation of and an ability in art, or the ability to cook well, or the ability to write a beautiful, legible slant penmanship aid this boy or girl in filling efficiently the very highest sphere of life possible to him. The social ideal of the time demands that our school system should view the child as public property, and "education as a function of the state."

Again, the supervisor's power to judge school values is a most important element in the basis of his efficiency. With the intricate development of our later day school systems, there has grown up among school people, perhaps not a confessed belief, but at least a course of action which recognizes the smooth operation of school machinery, and the complete accomplishment of a carefully worked-out curriculum as efficiency. Under the weight of this incubus, the supervisor becomes a mere manipulator of the details of organization, a detective following upon the trail of the violators of requirements; the teachers become assigners of pages and checkers of papers, and the course of study becomes the haunting specter of each schoolroom. As I have said, few of us, perhaps none, confess to such a creed of school management, but in too many of our cities this is nevertheless the course of operation. To make his work really efficient, as efficiency should be measured, in meeting the demands placed upon the schools by modern life, the supervisor must be more than an operator. He must be a shrewd discriminator between sordid details and things truly great and worth while. He must see in the power of the child, in his individual versatility and adaptability, in his attitude toward honest toil, in his ideals of life, and in his cleanness of character, the truly great results of the training of the schoolroom. He must not confuse these with the amount of work done or the course of study covered, or mere glibness of knowledge.

Furthermore, the supervisor should be a student of the social and industrial problems of his city. He should know the forces which make for right living and civic cleanness; and those which are standing in the way. He should understand the industrial conditions

which control the gaining of a livelihood, and the individual competition which the boy must meet as he begins life for himself. He must visualize clearly the relation of the school and of his own subject to these problems, and have definite ideas of his own part in helping the school system meet them. This principle applies not only to the whole school organization, but to each school unit of it. The social or industrial problem of *this* subdistrict may not be the same as the social or industrial problem of *that* one. The supervisor of music must understand that he cannot accomplish the same thing by use of his subject in the German-Russian, or Italian district as in the district peopled with the best families; nor can he do it in the same way. The supervisor of manual training must comprehend the difference in the meaning of manual training to a district of children of working-men, and its significance to the children of well-to-do parents. This demands that the supervisor be close to the everyday life of the city; that he be a student of its life, and a practical man in his application of the work of his department to the civic, social, and industrial needs of the community.

To put it in a few words, the relation of the supervisor to his teachers and principals depends upon: first, his vision of the social responsibility of the public school; second, his power of judgment in determining what things contribute most efficiently toward the meeting of this responsibility; and third, his practical knowledge of the immediate social and industrial problems of his community. If these be the elements which constitute the attitude of the supervisor toward his work, he immediately becomes to the teachers and principals a leader of didactic thought—an inspiration toward purposeful ideals, and a safe guide in their methods. As a leader of thought and an inspiration to high professional ideals, he brings to his teachers his own broad view of the work of the schools. They are transformed from the slaves of a system and a course of study into teachers, with a clear vision and a large purpose. They are able to discriminate between the things worth doing and the adherence to traditional detail; they have an instant and ever-present freedom in doing these things; for they know from the supervisor's breadth of horizon that it is the "letter which kills, but the spirit which gives life."

The supervisor thus becomes responsible for the professional growth of the teachers under his charge. If he is a supervisor of a special subject, he expects to find new teachers in the system prepared for the work of the subject; but from this point forward he is responsible for their technical advancement. He will provide means either in connection with a training school—if the school system is fortunate enough to have one—or in connection with some outside educational institution whereby the teachers may continue professional study, and he should provide in his own supervision the stimulus and encouragement for such study. To illustrate: I am acquainted with a school system in which the supervisor of art provides a class in public-school art in the School of Fine Arts of the state university, which fortunately is located in the city. Beginning teachers, unless they have had unusual preparation in art, are expected to take this course. In the same school system, additional salary inducements are given those who carry professional courses in the state university. The results both in art instruction and in general professional work are most marked. Thus, it seems to me, the supervisor should hold himself responsible for the professional advancement of those directly under his charge.

In a more detailed way, the supervisor should make his relationship to the teachers a means of improvement in classroom methods by his own personal example, by classroom instruction where necessary, by constructive criticism, by professional instruction in teachers' meetings, and by personal conferences. To do this he should certainly be vested with sufficient authority by rules of the board of education. He should be given scope enough to impress his ideals upon his teachers. He should be given power to require results in the largest sense. Within the limits of this conception, he should be given power to require a minimum course of study. He should have the fullest confidence of those with whom he works, and every relationship should be marked by friendship, cordiality, and mutual confidence. It is possible for a supervisor to accomplish the highest ideals

in his school work only by holding high standards and high purposes before his teachers, and by his own personal attitude and personal example, creating in them a desire for their attainment.

C. THE SELECTION AND TENURE OF OFFICE OF ASSISTANT SUPERINTENDENTS AND SUPERVISORS

I. J. M. GWINN, SUPERINTENDENT OF SCHOOLS, NEW ORLEANS, LA.

To enable me to present the facts in regard to the selection and tenure of office of assistant superintendents and supervisors, I sent a questionnaire to the superintendents of thirty-one of the largest cities in the United States. I received replies from twenty-seven cities. The questionnaire called for information concerning the number of assistant superintendents and supervisors of various kinds; the conditions of eligibility for appointment of these officers; how their qualifications were determined; the method of appointment, whether by the school board alone, the superintendent alone, or by the board on the nomination of the superintendent; the length of the term of office under the law, or rules of the school board, and in practice in the various cities.

All of the twenty-seven cities replying, except Buffalo, Detroit, Louisville, Salt Lake, and St. Paul, report from one to thirty-four assistant superintendents. I am informed that in Louisville and probably in Detroit assistant superintendents will soon be appointed. All cities reported the employment of from five to thirty-nine supervisors, exclusive, in some instances, of assistant supervisors. Thirteen cities report supervisors of primary grades; nine, supervisors of writing; twenty-two, supervisors of physical education; eighteen, supervisors of cooking and sewing; twenty-two have supervisors of manual training and industrial work; six, supervisors of evening schools; eight, supervisors of kindergartens; four cities have supervisors of special schools and activities, and practically all report supervisors of music and drawing. Among the supervisors reported were those for German in one city, social centers in two cities, and grammar grades in two cities.

In eight of the twenty-two cities reporting assistant superintendents some legal conditions of eligibility are mentioned. It is significant that in 64 per cent of the cities no legal limitation whatsoever is set on the qualifications of assistant superintendents, while in the eight instances noted above the legal requirements in regard to qualifications are worded in such general terms as "must hold a teacher's certificate," or "must be practical educator." The most definite statement in regard to eligibility is found in the law of New York City, where associate or district superintendents are required to be college graduates with five years of successful experience in teaching or supervision, or in lieu of the college education must hold a principal's license obtained thru an examination, with an additional five years of experience in teaching or supervision.

It is evident that the makers of school laws and of the rules and regulations of the school board have felt that the qualifications of assistant superintendents are best left to the judgment of the superintendent who should not be hampered by legal or other restrictions. The superintendent is expected to know what qualifications are requisite in any assistant superintendent, and his judgment is practically the sole basis for determining the qualifications of his assistants.

But seven cities require any examination of supervisors and in two of these the examination is for a teacher's certificate only. In twenty-one out of the twenty-seven cities, the judgment of the superintendent is depended upon to determine the eligibility of supervisors.

In eighteen of the twenty-two cities reporting assistant superintendents, the assistant superintendents are elected by the school board on the nomination of the superintendent. In three cities the board alone appoints assistant superintendents, and in one city the superintendent has full authority to appoint the assistants. The appointment of supervisors is

made by the board on the nomination of the superintendent in twenty-two of the twenty-seven cities, by the board alone in two cities, and by the superintendent alone in three cities.

In the matter of the tenure of office of assistant superintendents, ten cities report the term fixed or limited by law, other cities limit the term by rule of the board. In seven cities the term is indefinite, in nine cities the length of each term is one year, in one city two years, in two cities four years, and in two instances the term is six years. In practical operation of the rules and practices, the tenure is reported as for life in all but one city. Supervisors are appointed for indefinite terms in ten of the twenty-seven cities, in twelve the individual term is one year. In one city the term is three years, and in one it is six years. Of the twenty-three reporting the point, twenty-two report that in practice supervisors are kept in office for a life-term.

II. M. G. CLARK, SUPERINTENDENT OF CITY SCHOOLS, SIOUX CITY, IOWA

The selection of assistant superintendents and supervisors depends upon their qualifications to maintain successfully the relations and responsibilities already discussed. Consequently the consideration of their selection must necessarily presuppose a recapitulation of the principles of the previous papers. I shall, therefore, make no apology for this recapitulation but will treat the subject briefly from two standpoints: first, cabinet qualifications; second, the qualifications of the specialist.

The assistant superintendents and the supervisors constitute the cabinet of the superintendent. They are his chief consultants, as well as his departmental administrators. Upon their loyalty, frankness, largeness of vision, and ability in administration must depend to a large extent the success or failure of the superintendent's work. Their selection, therefore, is a matter of much concern both to the superintendent and to the school system.

The first consideration should be their qualifications for a cabinet relationship, a relationship that establishes them as supervisors in a far larger sense than the mere administration of their special subjects or departments.

In selecting his cabinet, therefore, the superintendent bears in mind that he is choosing his counselors, advisers, and chief administrators. Thru this cabinet he is to make his plans and personality felt thruout the whole system. They, the cabinet, must speak and act thru his authority, and as his representatives. They must assume responsibilities and solve problems. They must study the harmony and efficiency of each department and of the general school economy. They must discover leaks and report deficiencies and suggest remedies.

The superintendent will, therefore, consider the personal fitness of each candidate to enter into this most confidential relationship with him and with the plans and purposes which he has formulated for the growth and development of the school system.

As chief administrator of the system, the superintendent has a policy, or a general plan of administration. There is something to be accomplished; there must be carefully, well-formulated plans for its accomplishment. These are not simply present-tense plans but rather a policy which looks far into the future, regardless of the short tenure of his contract. He must plan as tho for a life-tenure; it is only by means of such plans that he can avoid time service. He has in his mind's eye the growth and development of five years, of ten years of substantial progress; an ideal, if you please, toward which he strives; an ideal which year by year is to become school life and school atmosphere.

He is to select a cabinet, therefore, that can understand and enter into these plans and ideals. It must be a constructive cabinet—one that will discuss plans with him freely, with perfect confidence, making suggestions and truing errors, adding of its own collective personality and inspiration, but all the time unifying and harmonizing into one whole, one purpose, this cabinet ideal. The cabinet is the agent which must establish this ideal

with the school community, but before it can be established these coworkers with the administration must feel the ideal to be their own. It must become a purpose with them, so thoroly understood that each teacher and school officer shall catch its spirit and likewise feel a confidence in the school policy, in the school leader, in the cabinet, and in each other, and be able, if required, "to stand and answer" whenever shall come the challenge, "Quo vadis?"

Here, again, must the superintendent take thought. The cabinet officer must understand the plans and policy of the administration of which he is a part, but he must remember also that the cabinet officer must be discreet. Unwise talking ruins many a cabinet plan before it is fully matured and before the public mind is ripe for its reception. A plan in successful operation is never criticized. A plan in the stage of formulation and trial is always open for criticism. Here, then, is the superintendent's first problem in choice. The selection of a cabinet officer large visioned enough to enter into the administration of his plans and policies, loyal enough and discreet enough to reveal only so much of these plans as have reached publication maturity.

Again, the superintendent is selecting a cabinet which should keep in touch with the pulse of the pupils, the teachers, and the community. This is not the petty tattling of the favor-seeker. It is the dignified cabinet discussion of the school-community good. An administration that is accomplishing its ideals will find itself beset with misunderstandings and with the complimentary enmity of charlatans and cheap political self-seekers. All this will often appear to the wise and discreet supervisor before it comes to the knowledge of the superintendent. The integrity of the system demands that it be protected against these dangers, and it is thru the loyalty and wise counsel of the supervisors that many a storm is averted. It is in this avoidance of trouble that the real strength of the administration, the superintendent, and his cabinet is shown. The discovery and quiet removal of frictions before they develop into conflagrations is a large part of the work of the administrative cabinet. This phase of the question constitutes the superintendent's second problem in choice—the selection of a cabinet that shall guard the integrity and harmony of the school system.

Next and not least in the selection of the cabinet is the task of finding among the candidates capable specialists who are broad-minded enough to see their work in its proper relation and perspective when viewed from the standpoint of the necessities of the whole school system. The specialist is likely to feel that his work is the keystone of the educational arch; the cabinet officer—that is, the worth-while supervisor—sees rather an arch made up, if you please, of a series of keystones, each fitted to its place with just the proper curvature and the proper convergence to give strength and efficiency and individuality to the whole system, and harmony to the cabinet relations. Each member brings to the system the specialist's knowledge; each subordinates his activities to their true value in the scale of the general school economy, and each seeks to express these values in terms of the child's need and of the child's understanding.

Again, the superintendent seeks to bring into his cabinet an influential individuality—influential because of its individuality. He seeks an individuality which will subordinate itself to the larger idea and the larger ideal, yet one that will discover in that very idea or ideal a free field for the expression of its own strength and personality. Such an individuality enlarges the ideal, gives value to the service, and clears up the weaknesses and errors which it discovers thru its own departmental activity. This perhaps is one of the hardest tests of the supervisor and yet perhaps it is the one that the wise superintendent will seek most industriously.

Again, in the selection of the cabinet, the superintendent will seek those who can bear responsibility, not mere henchmen. He seeks those who, having undertaken the school policy, will make that policy their own in its administration and in the accruing responsibilities which administration always necessitates. The responsibility of seeing the thing thru, the completion of the work, without the necessity of the superintendent

or others giving it further thought, is an essential qualification. The fact that each cabinet member may depend upon the other in the complete administration of plans gives confidence to the teachers, to the pupils, and to the school community. Before the teachers and the public, the qualified supervisors assume their responsibilities; they never take to cover, but stand "fire" for the cause that is their own by virtue of their selection. They stand with the administration for the successful maintenance of the plans and policies which they established. It is here that the backbone of the cabinet officer is tested. It is likewise here that the strength of the administration is developed.

In seeking a department specialist, we of course look for those qualifications of education and experience which naturally give confidence in the candidate's ability to organize and administer his subject. Oftentimes, especially in those schools in which only the smaller salaries can be offered, these qualifications are determined by the college record of the candidate. While I am not here to minimize in any wise educational qualifications as represented by the college or technical training, I am here to contend that there are qualifications of experience, mind, and heart that are of far more value to the supervisor than the possession of a degree in education.

Personally, I should endeavor to select for grade supervision a candidate who has grown into the larger field from actual grade-teaching experience. There are problems to be met which can be fully understood only by one who has had this experience. The teacher who has actually spent some years working with the child is in a far better position to organize school material to fit the child mind and to know the actual child possibilities than is the best-trained technical graduate without this practical experience. It is not so much the problem, as the way the problem is presented that makes it possible for child-understanding, and of all persons connected with the school, the grade supervisor must never shoot either above or below the child-interests and the child-understanding. The attitude of the supervisor will unconsciously determine the attitude of the teachers. Therefore she must present her material to her teachers with the attitude predominant that she would have them use in presenting it to their pupils. Herein is a need for actual grade-teaching experience.

Again, the supervisor needs this experience in order to know the real problems of the teachers. Logical paper organizations are comparatively easy for the mature student. But the practical, psychological organization of work that is possible for the teacher to accomplish, and that is truly helpful and inspirational in its method, is the work of the experienced and sympathetic teacher-supervisor. There are a hundred things that the specialist can never realize until he has had the actual problems of the classroom to solve and has really acquired the teacher-touch thru the actual process of child-mind contact. The grade teacher who is strongest along these lines is the one who should enter the specialist school with the greatest confidence of future success.

But here is often a difficulty in human nature. The promotion of a qualified teacher to a specialist's position often results in annoying troubles. The fact that it is a promotion from the ranks often leads to jealousies in the corps, for a prophet is not without honor except in his own country. Such a promotion will need the careful attention and co-operation of the whole administrative force.

The personality of the supervisor, like the personality of the teacher, is fully 50 per cent of real efficiency values. It includes nearly all that has been suggested under cabinet selection, for the capable cabinet officer possesses the personality to make the work effective. Under the title of personality, however, I would particularly emphasize four points:

First, sympathy: that peculiar quality thru which the supervisor unconsciously enters into the life and plans of every teacher and pupil with whom she comes in contact. The willing ear, the willing hand, the discreet tongue are all elements of sympathy. An atmosphere that is helpful, encouraging, cheerful, loyal, and always constructive permeates such a character.

Second, dignity: not the unbending aloofness of the small-minded, but rather that attitude of mind which of its own calibre establishes its authority without question, and always with respect.

Third, inspiration: a personality so permeated with the principles of educational faith, that mere contact inspires coworkers with the same faith and to a corresponding co-operative activity.

Fourth: if the supervisor possess the three qualifications named, the fourth is most surely to be found; viz., the natural leader. There are always to be found in society those about whom we group ourselves and to whom we more or less unconsciously render homage in the various activities of our social welfare. The successful supervisor possesses this personal qualification. It has demonstrated itself from early childhood days, and associates have again and again acknowledged it. It is not an acquired characteristic.

Little more need be said concerning the supervisor's education than that she must possess a broad mastery over her subject, that she must be a student and one that continues the student attitude. Most important is the scientific attitude toward education. The selected supervisor believes in education as a science—not as a mere drill process. She is a student of mind, a student of social conditions, and a student of economics. She knows the needs of the child and the needs of society and strives in every way in the administration of her subjects to apply those principles of sociology and psychology which shall bring about the greatest educational activity on the part of the child with the least effort on the part of the educator. In other words, she seeks the true line of least resistance in education. Education is to her a profession which she honors and strives to ennoble. She is a worth-while supervisor.

Fortunate is the school system that has made such a selection. Progress in all lines of educational activity and harmony in administration cannot but follow. Appreciation for such work should be practical. A tenure of office secure and unquestioned and a salary commensurate with the service rendered are but matters of mere justice and of sound business sense.

ROUND TABLE OF STATE AND COUNTY SUPERINTENDENTS

THE BEST FORM OF NATIONAL AID TO STATE SYSTEMS OF INSTRUCTION FROM THE VIEWPOINT OF A COUNTY SUPERINTENDENT

E. M. RAPP, SUPERINTENDENT OF BERKS COUNTY SCHOOLS, READING, PA.

The best form of national aid to state systems of instruction, in my opinion, is vocational education cast on the lines of the Page bill.

This bill is neither radical nor revolutionary. It is the logical extension of the policy which the government adopted when the act of 1862 was passed. It would therefore inaugurate no new fiscal policy nor establish a new precedent. No one questions the constitutionality of the land-grant college acts, and no one will wish to test the constitutionality of this bill if enacted into law. This measure promotes the general welfare. It simply attempts to adjust legislation to new conditions, to larger numbers, and to ampler resources. It is also a movement toward popularizing and amplifying present knowledge and practice. This bill establishes a national policy with reference to secondary education, which it is not possible for the individual states to do. Neither Pennsylvania, New York, Massachusetts, nor Minnesota can establish a national propaganda or system of education which will place this country on a competitive basis with such nations as Germany and France. The value of this bill is not so much in the $14,000,000.00 it will appropriate, as it is in the general educational policy it will inaugurate.

Federal initiative will certainly stimulate the inactive states along vocational lines

and nationalize the movement at once. This plan does not smack of paternalism or of charity. From first to last it provides that whatever the federal government shall do shall be matched by the states. The Lever bill, recently before the Senate and a bill similar in many respects to the Page bill, does not make this provision in all instances but provides that $10,000.00 be immediately available to each state without duplicating it.

Duplicating the additional sums that come to the states year after year stimulates self-help and deepens their sense of responsibility. Truly, the best way to help people is to help them to help themselves. So long as the federal government secures two-fifths of all taxes raised, and spends twenty times as much on war and navy as on education in the arts of peace and homemaking, there will arise no harm from co-operating with the states in producing more efficient citizens.

The Page bill will prevent to some extent centralization. It really decentralizes. By building up strong state educational institutions, under what is in effect a federal endowment, the states are made relatively stronger. The schools remain wholly under local control, the only requirement being that they use the appropriation for vocational education only. Returning to the states a portion of the taxes collected from them would prevent the centralization of social, intellectual, financial, and even governmental power.

The proportion of the taxes which the federal government will collect from the people will increase, unless we change radically our fiscal system. This money is going to be spent, and if it is not redistributed to the people of the states from whence it came, and spent for laudable projects, it will be spent on less important and less worthy objects. Money invested in battleships centralizes power, money invested in education makes stronger the units of local power and thus decentralizes. The expenditure of the price of one battleship annually will increase the efficiency of our industrial system and thus increase the annual production sufficient to pay for a dozen battleships. Federal appropriations also tend to take money from the stronger and more prosperous states and sections to help build up the poorer and more backward states and sections, and to this extent it would equalize the conditions of life over the country.

The administrative features of this bill have been freely criticized, more particularly among school men because of a division of authority. A single national agency, and a single agency within each state, have been advocated. The men who from time to time prepared and fathered it have carefully considered this matter and conferred with those best qualified by experience to advise, and have finally concluded that the supervision of the extension work in agriculture and the branch-station work would be best administered by the Department of Agriculture, because this department has long been the special agency in touch with agricultural and homemakers' organizations. The labor organizations have come to regard the Department of Commerce and Labor as the connecting link between the government and themselves and this department is therefore vested with a co-operative relation in connection with those schools which are to teach the trades and industries. The supervision of the schools provided for in the bill is left entirely to the commissioner of education, who will, of course, be the direct representative of the Department of the Interior. It seems eminently wise that the Department of Commerce and Labor and the Department of Agriculture be authorized to give co-operative assistance to the Department of the Interior and thus help the Bureau of Education to have the widest possible support. The public welfare is not dependent upon the channel or channels thru which the money is expended. The public has little interest in who does the work, as long as it is effectively done.

The great waste in this country is ignorance. It costs more than wars, floods, fire, and cyclones combined. The waste in agriculture, in the trades and industries, and in home economics runs into billions of dollars. The farmer especially has been the greatest waster; he must be made the greatest conserver. The solution of this problem is more vital than the administrative difficulties that may be encountered in this bill. There is no better-established economic law than that of the relation of the right kind of education

to the productive capacity of the people. The relation is so vital that you can measure the wealth-producing power of the people by the educational privileges which they enjoy. Is it not time to turn our attention to the gigantic and monumental waste due to ineffective education and stop turning our apochromatic objectives with collar adjustment upon comparatively insignificant matters? This bill has a tendency to turn our educational ideals more toward the wholesomeness of productive occupation, rather than away from manual vocations, and will do much to break down the artificial barrier which exists between the minds of those who labor and produce and those who obtain their living in occupations not manual. We all believe in equality of opportunity and universal intelligence, but have made no strenuous efforts in giving this boon to the great mass of people. Are the sons of our toiling millions receiving their fair equality of opportunity to which they are entitled? Are they getting a square deal educationally? For centuries, education of the masses was opposed by the royalty, as dangerous to power; by the church as dangerous to creed. We have too long confined technical education to the professional classes. Let us provide, along with general schooling, industrial education, not only to the privileged 5 per cent, but also to the 95 per cent who are doing the world's work. Too long we have been taking money from the masses and using it almost exclusively for the preparation of leaders.

This may have been wise thus far, provided these trained leaders have rendered service to society and nation. But too long we have had an educational holdup by the scholastics for the benefit of the few. Wealth snobbery is still too frequently supported by scholastic snobbery. The one thing that scholastic aristocrats refuse to see is that forms of education which make men self-supporting often have as much, or more, real cultural value than those which concern only the pedant or classical dilettante. Education must be for service as well as for sweetness and light; for a vocation as well as for an avocation. It has been truly said that classics and calculus are no more divine than machines and potatoes. Universal education must contain a large element of the vocational. The first duty every man owes to society is to support himself. The law of our natures makes the economic fundamental. Food and clothes and shelter for themselves and for those dependent upon them occupy the first place in men's thoughts; and they ought to. The æsthetic and the spiritual belong to the superstructure. Two men are to be pitied: (1) the one who builds an economic foundation and is satisfied; (2) the one who attempts to build an æsthetic superstructure without a material foundation; and the second failure is more pitiable than the first.

Let us learn how to make a living in an economically sound and defensible way and then philosophize to the happy end of our days. The curse of this age is its unwillingness to give what the world needs in order to secure what the individual desires.

The great need of this country is not more lawyers, more doctors, more professional men, but more skilled laborers, more trained farmers, and more homemakers. We have too many morbid thinkers and miserable workers. Our leaders never get beyond the sophomoric stage of political economy. Many a man who passes for a thinker is spouting hazy philosophic impressions he recalls from his school career of twenty or forty years ago. These men ought to be studying political economy, history, philosophy, sociology, and the science of government now, as they have need, just as they should formerly have been taught at school how to make a living for themselves instead of off the other fellow.

Edwin G. Cooley in a discussion on industrial education says:

> We can become a true democracy only when we shall be as much concerned about training a good blacksmith as we are about training a good lawyer; when our system of schools offers equal opportunities to all classes and all talents.

A commendable feature of the Page bill, from my viewpoint, is the provision to prepare teachers in state normal schools or other training schools to give practical or technical instruction fitting for useful service in agriculture, the trades and industries, and home economics. The federal fund may not be used to teach the so-called cultural studies, but

must be used solely to educate those who are to teach the vocational subjects contemplated in the bill. The country school is in its best sense an industrial school, and only those teachers can do best work therein who have had the personal experience in industrial training and the changed point of view which only a school having industrial training can give. How can there be a redirection of education in the country or an adjustment of the school to the industrial life of a community if teachers are not properly trained? It is only thru these industrial subjects that teachers can interpret the natural and industrial environment of the country school. The teacher in the country is to be partly blamed for the exodus of the farm boy to the city, as he has constantly idealized captains of industry, railroad presidents, and military heroes, covering up their iniquities and painting halos around the heads of standard oil magnates and beef trust barons, who spent in riotous living the dollars filched from the farmers of the land. If normal schools would prepare teachers to impart to their pupils, in a way easily assimilated by them, the beauteous and profitable truths of growing things; to inspire and stimulate a love for the garden and the farm; for horticulture, and animal husbandry, then, it seems to me, there would be little left in the educational world to be desired. I do not mean in all this that every boy should be a farmer, but I do mean that the education that should be given boys who are to be farmers will make the best kind of foundation upon which to rear the structure of any calling or profession.

The kind of teacher we want and must have is one who can gather her class about her as a hen her brood, and can interest them in the conception, the growth, and the fruiting of things. This is the study of life. It is revelation—life revealed. It is mastering, step by step, God's creative processes in the sweetest, simplest manner. The organization of a well-planned series of consolidated central schools with connecting high schools is the solution not only of the rural school problem but the rural community problem as well. The teachers of these schools of course will come largely from the agricultural colleges, will be employed the year around, and will live with the pupils and farmers in their respective communities, working with the students and their parents about half the year on the farms, thus making the farm and home life educational, and the farm home and civic and social life of the community better and more wholesome. What power in farm pride this ambassador of the state and nation would impart!

This measure greatly stimulates the movement back to the farm. The country life movement, despite the picayunish economies of a short-sighted congressional policy, is the most universally indorsed movement of the time. The social and industrial revitalization of country life in this generation is one of the most hopeful signs of the times. In solving this problem, we solve one of the most fundamental problems of the century, the problem of checking the movement of population from the country to the city, thus removing one of the chief causes of the high cost of living. The mad rush to the cities, called the nation's funeral procession, must be counteracted. No other tide now seems so strong in the public opinion of our country as this determination to build up the country on a right and profitable basis, not only for the farmer's sake, but for the sake of our country, and of a wise and safe civilization.

The provisions in the Page bill relative to additional experiment-station work, and the provision for extension work both in industrial and agricultural work, have been criticized because of already generous support by the national government. It has been said that these should be separate measures. But the need of this kind of work at present in America is great. This bill is not necessarily drafted to the needs of the South and West, as it contemplates assisting industrial as well as agricultural and household arts education. It is right and proper that the agricultural interests are emphatic in the support of the bill. They are at last coming to their own. The prosperity of this nation, in the last analysis, rests upon agriculture. This is not a mere platitude. The backbone of a nation is its farming class, and no nation was ever overthrown by its farmers. In the solution of the farm problem is bound up the prosperity, the happiness, the very

existence of the nation. The high cost of living is a more serious problem in America than Europe because of the disproportion of the progress of the industries and that of agriculture. America is fifty years behind Europe agriculturally. Men of vision who study history and who are able to think in large units see the peril of our nation and warn us.

Rome ruled the world but fell, not on account of pride and immorality, not from the enervation of luxury, but because of defiance of economic law. Rome fell because of the exhausted or wasted agricultural resources of the country. A Chinese philosopher centuries ago uttered a profound truth:

> The well-being of a people is like a tree; agriculture is its root, manufactures and commerce are its branches, and its life; if the root is injured the leaves fall, the branches break away and the tree dies.

Garfield said:

> At the head of all sciences and arts, at the head of civilization and progress, stands, not militarism, the science that kills, not commerce, the art that accumulates wealth, but agriculture, the mother of all industry, and the maintainer of human life.

The great centers of industry and commerce must always depend for their moral and physical health upon a constant influx of fresh blood from the country. The ancient civilizations were chiefly military; our modern civilization is pre-eminently industrial. Physical strength for military purposes is no longer so important, but physical strength, integrity, and independence still remain just as necessary for our industrial democracy as they were for the military nations of the ancient world.

Yes, the wars of the future will be economic. Industrial education is but one way of spelling economic prosperity. A race for commercial supremacy is now on among the nations of the earth with Germany in the lead. National disarmament may come, and I am praying to God that it will come, but every machinist who stops making cannon will be set to making gears, and cams, and dynamos, and that nation whose machinists are the cleverest, whose chemists the most resourceful, whose designers the most artistic, whose farmers the best scienced, whose homemakers the most efficient, and as a whole the best trained—that nation stands to win.

Let the educational slogan of America be:

> "Learning to do; doing to earn; earning to live; living to serve."

THE BEST METHOD OF APPORTIONING AND ADMINISTERING STATE AID

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It is now generally accepted that public education in America is a state function. Its organization and its support are made possible by means of state legislation. Legislative provision is everywhere made by the state for the existence of publicly supported elementary and secondary education; and also in many cases for such special forms of education, as collegiate, vocational, and correctional.

Each American state now contributes in greater or less degree toward the support of the public education which it requires or makes permissive for local communities to maintain.

The following are the principal directions taken in administering such support:

1. It has been found expedient that the state support out of its own funds certain educational institutions which serve the state as a whole, or areas of the state larger than the county or city. Among these institutions are state universities, agricultural colleges, normal schools, schools for delinquents, defectives, and dependents, and also a variety of secondary institutions of technical, agricultural, and household arts education.

2. In certain instances, the state has constituted itself a taxing authority to the extent

of levying upon local communities a specific tax for the support of schools; the state returning to each community the share which it has paid in under the requirements of the tax thus imposed. In this way, the state is able to compel communities to provide at least a part of the money necessary for the support of public schools. The method of distribution here employed is, of course, simple, each community receiving according as it has contributed. It is well known that this method was formerly employed freely thruout southern states.

3. In many states, the income of invested funds, as well as the money derived from the proceeds of state taxation, is distributed to local communities in such a way as to aid or promote local educational effort. This general method of assisting public education is now found in quite general operation in almost all states. Such state funds are usually distributed to local communities in accordance with one or more of the following principles:

a) State aid may be apportioned to each community in proportion to the total number of children found therein of specified ages, as shown by the school census. This method, known as the census basis of apportionment, presupposes that the number of children to be educated constitutes a satisfactory index to local educational need.

b) State aid may be apportioned on the basis of the actual number of children attending school, as measured by average membership, average daily attendance, or otherwise.

c) Special appropriations may be made to needy communities. Apportionment of state aid in accordance with this principle assumes a great variety of forms. Usually, however, local property valuation, local rates of taxation, local conditions of population and of school attendance are taken into account.

d) State aid may be given for the support or encouragement of particular forms of education, such as industrial, agricultural, etc., or for the development of specific adjuncts, such as expert supervision, medical inspection, care of defectives, provision of suitable buildings, etc.

It is evident that the apportionment of state aid in accordance with objects set forth in paragraph 3 above rests upon one or both of two principles; namely: (1) that state aid is given to assist the local community in meeting definite educational needs; or (2) state aid is given to stimulate the local community to further educational effort.

In almost all forms of apportioning and administering state aid now practiced, one or both of these two principles are involved. State aid may be given to supplement local effort in meeting definite need; or it may be given to stimulate local effort in making provision for a more advanced quality of education. As a rule, some conditions attach to almost every form of state aid, even tho these relate only to the minimum number of weeks that school must be maintained or to compliance with the general laws regarding education.

It is clear that in devising plans for the apportionment of state aid consideration should be given, on the one hand, to the fact that the state establishes by law certain conditions which are expected to be met thruout the state as a whole, and, on the other hand, to the fact that local communities, able or disposed to do so, are expected to do more than meet the minimum standards thus imposed.

The ability of any given community to maintain a system of public schools is, of course, fundamentally affected by its ability to raise money thru taxation. Assuming an equality of valuation thruout a state, the ability of the community to raise money by taxation may be expressed in terms of its general tax rate and its school tax rate. It is just and expedient for the state to recognize for all communities a maximum rate of taxation for school purposes beyond which, except for extraordinary reasons, the community should not be obliged to go.

Hence, as the first condition governing in the apportionment of state aid, should not reference be made to what has been done by the local community itself in meeting the minimum educational standards set by the state? If the local community has not expended for this purpose an amount represented by an approved rate of taxation for this purpose for the state as a whole, then no state aid should be given. For example, the state may prescribe that certain types of public schools shall be maintained; that these

schools shall be open for a specified number of weeks each year; and that teachers holding indicated minimum certificates, and in receipt of minimum salaries, shall be employed.

Similarly, the state may impose minimum conditions as regards buildings, equipment, supervision, medical inspection, special provision for defective children, etc. It is obvious that if the state prescribes these minimum conditions, and if the local community has done its best to meet them, the state is first under obligation to make it possible out of state funds for these standards to be met.

But the state is not only interested in the maintenance of minimum educational standards; it desires that, where possible, communities shall go further. Hence the state is justified in encouraging, by the use of state funds, local communities in their efforts to make more complete provision for the educational needs of their children. To this end, the state may be free to assist the establishment of special or exceptional types of approved education, such as industrial or agricultural. It may assist communities, not required by law to maintain high schools, in maintaining them. It may lend its aid in providing for the education of the deaf or other defectives, or in maintaining schools for delinquents. It may encourage local communities to diminish the number of children per teacher, to employ teachers of more advanced professional training, or in maintaining facilities for the training of teachers in service. It may put a premium upon length of school term or large attendance. By special grant it may encourage the development of medical inspection, transportation of children to central schools, the provision of adequate laboratory facilities, free textbooks, and playgrounds. All of these are elements in higher educational efficiency. Each might well be encouraged out of state funds, subject, of course, to the requirement that the local community shall make a due contribution thereto, and shall also make adequate state inspection possible.

It should be accepted as a truism that wherever state money is paid toward the support of public education state supervision should follow. It is probable that in most of the American states, at the present time, such state supervision as exists is of a very inferior quality. In theory, the state should be in a position to develop standards in education in advance of the local communities, and to promote their local application. In practice, our administrative machinery is as yet rarely equal to this task. Further application of the principle of state aid would seem to make it increasingly incumbent upon the state to develop such supervision. This can be carried on only by experts. The state possesses no more powerful instrument of advancing public education than its ability to make the receipt of state aid contingent on the maintenance of high standards locally.

To this end, however, it is absolutely essential that the two purposes of state aid, contrasted above, should be clearly defined. Where the state assists local communities to supplement their own financial resources in order to meet the minimum requirements imposed by the state, the character of the supervision may well assume already well-defined forms; whereas, when the state deliberately uses its own resources to further the development of approved types of new or supplemental education, then the co-operation and supervision of the state thru its experts should assume quite a distinct character.

In the New England states, from the standpoint of the public schools, only two administrative agencies need be recognized: namely, the state, and the town or the city. In southern and western states, in a large number of instances, it is necessary to recognize three agencies with distinct responsibilities as to taxation and distribution of funds, namely, the state, county, and the local town or district. In a few instances, even four such agencies are involved.

Experience would seem to show that in the distribution of money by the state, the local school administrative authority should be recognized primarily, whether this be the district, the town, or the county. In other words, the state should deal as directly as possible with the local authority responsible for the administrative efficiency of the schools. The apportionment of state aid to counties, in cases where the county school authority

has comparatively little administrative responsibility, involves an element of confusion and uncertainty making for inefficiency. In cases where the town or district actually administers the school, but the county is made the center of auditing and bookkeeping, it is, of course, desirable that state moneys should pass thru the customary channels of the county office. State apportionments, however, should be designated for the particular administrative units which are held responsible for their efficient expenditure. The county, under these conditions, becomes merely a convenient intermediary for transmission and accounting.

In conclusion, it is suggested that wherever methods of distributing state funds are to be revised, full consideration should be given to the desirability of giving separate application to the opportunities discussed above. A certain amount of state money should be deliberately apportioned with a view to meeting specified conditions as to taxation, etc., and with a view to enabling them to maintain prescribed types and qualities of education. A sum of money should be available to assist such communities as elected, in the maintenance of newer types of education not prescribed by law. In this way, while insuring to all the children of the state such uniform educational opportunity as experience justifies, there is also held out to communities electing to advance educational standards, a distinct financial incentive to do so. Educational administration is thus made flexible and high-grade experimentation under the supervision of the state is made possible.

REPORT OF THE JOINT COMMITTEE ON GRAMMATICAL NOMENCLATURE

SALT LAKE CITY, UTAH, JULY, 1913

PREFACE

Two kinds of grammatical terms are effective. In one, a given term exactly sets forth the nature of that for which it stands. So the term *descriptive*, as applied to an adjective like "good" or "bad." In the other, the term in itself means little or nothing to the student. Thus *noun, adjective, verb, indicative, subjunctive, infinitive*. These serve, just as *x, y, z*, etc., might serve. At present, at any rate, it seems best to let them alone.

But there is still a third kind. In this, the terms are intended to be exactly descriptive of that for which they stand, but are not. An example is the name *imperfect*, now happily superseded, in English grammars, by the name *past*. Terms of this kind are meant to belong to the first class, but fall short of reaching it. They form a large proportion of our accumulated and conflicting nomenclature.

Yet the aim of their makers—exactness of representation—was in every case right. Nothing but praise can be given to any effort to reach this ideal. For the young student, and indeed for many a teacher, the name given to a phenomenon in the grammar which he uses—if this name has any obvious meaning at all—largely determines his conception of the phenomenon, and is a constant influence toward the building-up of a clear understanding, or of the opposite. The man who frames a working name that is a more perfect description of the force of a given grammatical phenomenon than any existing before is not only making that phenomenon more intelligible to the student, but is also reducing the work to be done. The impulse toward perfection in grammatical nomenclature is a good one; and this impulse necessarily leads to the invention of new terms.

Nevertheless, the present state of things is deplorable. In the very desire for betterment, we have reached a multiplicity of terms, even for grammatical relations about the nature of which there is no real difference of opinion, as, for example, those seen in the italicized words in "John is *good*," "This is *John*," "I admire *John*," "We made John *president*." For the first of these, there are nine different names in twenty-five of the English grammars in use in the United States today, for the second ten, for the third seven, and for the fourth eighteen. Thus "good" in "John is *good*" is variously called, according to the grammar used, *attribute complement, predicate adjective, subject complement, attribute complement or predicate adjective, subjective complement, complement of intransitive verb, predicate attribute, adjective attribute*, and *predicate*. The result of such a state of affairs is almost hopeless confusion to the student as he takes up a new text in passing from year to year, or when a new book is adopted, or when he changes his school. Even the strongest students are bewildered. And the teacher's burden is likewise heavily increased, since he often has to deal with students who do not understand one another's answers to a grammatical question, even if every answer is right. Moreover, the teacher is obliged to break up his own phrasing, which has so passed into his subconsciousness as almost to utter itself, and watchfully build up a new one, from which he will for a long time slip back every now and then, in spite of his best efforts. The situation as we now have it is wasteful from the point of view of accomplishment, pitiable from the point of view of the needless inflictions which it puts upon the unfortunate pupil, and absurd from the point of view of linguistic science. As long as it exists, it will make the ideally successful teaching of English grammar in our public schools impossible.

But even this is not the whole story. Nowhere else, it is true, has so great a variation of terminology come into existence as in the grammar of our mother tongue. Yet a considerable variation does exist in the grammar of every language; and naturally, in any case, a student who goes on from English to the study of German, or French, or Latin,

tho he will probably use but one grammar in the new language, will find a terminology largely different from that in which he has been schooled. If he studies two or three of these languages, he will repeat the experience. A new language, a new set of terms! It is as if a student of mathematics, having mastered the common terms *addition*, *subtraction*, *multiplication*, *division*, *quotient*, and the like, for arithmetic, had to learn to call the same things by new names when he came to algebra, and then by still different names when he came to physics. A system for high-school instruction more flatly opposed to the modern demand for efficiency could hardly be devised.

Two further results follow. In the first place, the student is almost sure to regard grammatical work as arbitrary and unreal; and he cannot be blamed if he finds it uninteresting. In the second place, he naturally comes to feel that the various languages which he studies have no relation to one another. This belief is frequently shared by his instructors. Many a teacher feels that the syntax, for example, of the language which he teaches stands quite by itself, and has nothing in common with the syntax of the language taught, perhaps, in the next room.

Both of these feelings are mistaken. The phenomena of language are as real as the phenomena of physics or chemistry; and the study of the operations of the human mind as seen in language is as interesting as the study of any of the other operations of Nature. The languages studied in our schools are, also, the descendants of the same language, the "parent speech" once spoken by the ancestors of almost all the scholars; and, while the words of that parent speech have largely changed their forms, and differ in the languages spoken today, the ways in which they are used have changed relatively little. The relations expressed, for instance, by the terms *subject*, *predicate*, *direct object*, *indirect object*, *purpose*, *result*, *cause*, have not changed at all: it is only *our ways of speaking about these relations* that differ. And if the student, having learned the conception and the name for any of these in any language, found the same conception set forth by the same name in any other language that he might study, a sense of law and order would succeed the present sense of arbitrariness, and, in many minds, a feeling of interest would succeed the feeling of indifference or distaste.

Further, the adoption of a system of identical nomenclature for identical phenomena in all the languages of our family which the student may take up, with its natural accompaniment of differing nomenclature at the points where the phenomena differ, would have the effect of making these differences stand out more sharply in his mind.

It is such a system which the Joint Committee of the National Education Association, the Modern Language Association of America, and the American Philological Association is charged to frame. It has done its work with the utmost care and a large expenditure of time, and has brought to the task its best knowledge and complete devotion. It has also had the assistance of a committee appointed by the National Council of Teachers of English. Yet it is unlikely that the Joint Committee has everywhere made the best choice. The fact that at a number of points its system differs from those of the corresponding English and French Commissions[1]—just as their systems differ from each other—indicates the improbability that complete success has yet been attained. That the system which the Committee offers should at every point be satisfactory to any one American teacher is not to be expected. The New York Committee of Teachers of English and the New Jersey Committee, separated from each other by only a narrow strip of water, have reached conclusions diametrically opposed at many points. But, after long discussions in full meetings, opened in many cases under great differences of opinion, the American Joint Committee has come, on almost all questions, to a unanimous opinion. And it is believed, therefore, not only that the acceptance of the system recommended will at once lead to a state of things much more satisfactory than the present one, but also that the greater part of the system will successfully stand the test of future thought; while the use

[1] The German Commission and the Austrian Commission, which have been for some time at work, have not yet published reports. The Austrian Commission has, however, issued proposals.

of it will at the same time direct attention more sharply upon points at which its results may at some future day be bettered.

In the field of syntax, the necessary principle in determining what constructions shall be distinguished has seemed to the Committee to lie in the answer to the question, "What sensibly differing ideas exist?" But it must constantly be borne in mind that two constructions the ideas of which lie, in the main, well apart, may, at points in their range, approach so close to each other that it is occasionally difficult to choose between them in classifying a given example.

The Committee has avoided matters of controversial theory, wherever it has been possible to do so without leaving a variety of terms for phenomena that must be dealt with in the schools.

For us English-speaking people, the whole foundation of grammatical study is laid in the study of English in the grammar schools. All our subsequent work, in whatever language, is based upon this study. The Committee has kept this fact constantly in mind. In every case, the name to be used in the teaching of English is given first. The Committee has also recognized that certain distinctions which it seems desirable to make in the more advanced study of English, and in the study of other languages, need not be made in the grammar schools. The form of presentation adopted is intended to make the lines of demarcation clear.

For greater convenience in use, the display is tabular. With the same end in view, the nomenclature needed for the word as such is first given, the nomenclature for the relations of words as they appear in speech or writing being placed later. This order of arrangement must not be understood as meaning that, in the opinion of the Committee, actual work should begin by dealing with the word as such. The contrary is the case. Work should begin with the relations of the sentence, which are set forth on p. 323. Similarly, the inference should not be drawn that every distinction for which terms are provided, as *common or proper*, *transitive or intransitive*, should constantly be made wherever the part of speech concerned is dealt with. What appear to the Committee to be desirable *cautions* are given in the second part of the report. But it has seemed advisable that the tabular exhibit should contain all the technical terms which will anywhere be needed in classroom work.

In starting constantly from English, the Committee has done no wrong to the study of any other language. In a few instances, fuller distinctions are needed in other languages to account for actual difference of forms (as in the case of the *adverbial* construction of the noun, and the names for some of the tenses of the verb), and these distinctions have to be provided for in their proper places. But in the great majority of instances, whatever term is best for a given phenomenon in English is best for that phenomenon in any language in which it appears.

The terms which now by general usage stand for given phenomena, tho in themselves meaningless to the student, are left unchanged, with the exception of a few for which really clarifying terms can easily be substituted.

The considerations which have guided the Committee in the choice of terms that aim at actual characterization of phenomena are three—of which the last properly follows from the other two.

A given term should describe as exactly as possible the phenomenon to which it is assigned.

If there is a familiar word in common use outside of grammar, which will serve as a grammatical term, it should be preferred to one that is not familiar. For this reason it is better, for example, to say *descriptive adjective* than to say *qualitative adjective*.

A term which is selected as the most exact characterization of a given phenomenon should be employed for every phenomenon identical in force. Thus, if the word *descriptive* is employed to designate a certain kind of adjective, it should also be employed to

designate the kind of *clause* which has the same force. We should say *descriptive clause*, and not, as a number of Romance and Latin grammars now say, *clause of characteristic*, even if the latter term were equally exact. Similarly, in place of *genitive of quality*, now common in German and Latin grammars, we should say *descriptive genitive*, adding *or ablative* for Latin. This would give us, in place of the diverging terms *descriptive adjective, genitive or ablative of quality*, and *relative clause of characteristic*, the accordant and mutually illuminating terms *descriptive adjective, descriptive genitive or ablative*, and *descriptive relative clause*.

In brief, the purpose of the system of grammatical nomenclature recommended in this Report is to clear the way for the intelligent study of the field with which it deals—the relations of thought as seen in language.

PART I. NOMENCLATURE

A. THE MATERIAL OF SPEECH

THE PARTS OF SPEECH

Noun	Adverb
Pronoun	Preposition
Adjective	Conjunction
Verb	Interjection

NOUN

Kind:	Common, proper
	Abstract
	Collective
Declension:	(for German only): Weak, strong
Gender:	Masculine, feminine, neuter (no neuter for Romance[1])
Number:	Singular, plural (for Greek add: Dual)
Case-forms:	For English: Common, genitive
	For German: Nominative, accusative, genitive, dative
	For Romance: No distinction of case
	For Latin and Greek: Nominative, vocative,[2] accusative, genitive, dative, ablative (for Latin only), locative[3]

[1] The word "Romance" as used in this report is to be understood as meaning modern French, Italian, and Spanish.

[2] The "vocative" should not appear in paradigms except where a distinctive form exists to indicate address.

[3] The term "locative" should be used only in the explanation of special forms, not in giving paradigms.

PRONOUN

Kind:

Personal
(For Romance only: Conjunctive, disjunctive)
Possessive
Demonstrative
Interrogative
Relative
Indefinite
Reflexive
Reciprocal
Intensive
Identifying

} Each of these shares the character of one or more of the following: Personal, demonstrative, indefinite.

Most pronominal words may have either a substantive or an adjective use. In their substantive use they are to be called *pronouns*. In their adjective use they are to be called *pronominal adjectives*.

Person: First, second, third

Gender: Masculine, feminine, neuter

Number: Singular, plural (for Greek add: Dual)

Case-forms: For English: Demonstratives do not distinguish case by form. Some indefinites, and the second members of reciprocals, are like nouns in respect to case. Most personal pronouns, together with 'who' and its compounds, have two case-forms, a *nominative*, and an *accusative-dative*. The forms often classed as the "possessive" case-forms of these pronouns are to be classed as *possessive pronouns* or *possessive adjectives*.

For German, Romance, Latin, and Greek: Nominative, accusative, genitive, dative (for Latin add: Ablative)

ADJECTIVE

Kind:	Descriptive Common, proper Limiting Article Definite, indefinite Pronominal Possessive Demonstrative Interrogative Relative Indefinite Intensive Identifying Numeral Cardinal, ordinal
Degree:	Positive Comparative Relative, absolute (not for English or Romance) Superlative Relative, absolute
Declension	(for German only): Weak, strong
Gender	(not for English): Masculine, feminine, neuter (no neuter for Romance, except in one use in Spanish)
Number:	Singular, plural (for Greek add: Dual)
Case-forms:	As in nouns, except for English, which does not distinguish case in adjectives

VERB

Kind:
Transitive
Intransitive
Linking, complete

Conjugation:
Regular, irregular (but for German: Weak, strong)
For English, Italian, and Spanish: Progressive
For English: Special interrogative, negative, and emphatic forms of present and past (with the auxiliary 'do')
For German and Romance: Reflexive
For French: Interrogative
For Latin and Greek: Deponent, semi-deponent
For Latin: Periphrastic active, periphrastic passive

Person:
With personal subject: First, second, third
Impersonal

Number:
Singular, plural (for Greek add: Dual)

Voice:
Active, passive (for Greek add: Middle)

Mood:
Indicative, imperative, subjunctive (for Greek add: Optative)
The modal forms are always *predicative.*

Non-modal forms:

Substantive
- Infinitive (modal in certain uses in certain languages)
- Gerund (for English, Romance, and Latin)
- Supine (for Latin only)

Adjectival
- Participle
- Gerundive (for Latin only)

The non-modal forms are *non-predicative.*

Words which originated as gerunds or participles are to be classed as nouns or adjectives, not as forms of the verb, when the verbal force no longer predominates.

Tense:

Modal forms:

For English and German: Present, past, future; present perfect, past perfect, future perfect; past future,[1] past future perfect.

For Romance: Present, past descriptive (indicative), past absolute (indicative), past (subjunctive), second past (for the Spanish subjunctive only), future, past future; present perfect, past perfect, second past perfect, future perfect, past future perfect.

For Latin: Present, past descriptive (indicative), past (subjunctive), future; perfect, past perfect, future perfect.

For Greek: Present, past descriptive, future, aorist; present perfect, past perfect, future perfect; second aorist, second present perfect, second past perfect.

Non-modal forms:

For English and Romance: Present, past. The compound participle of the type 'having been written,' in English and Romance, is to be called the *phrasal past participle.*

For German and Latin: Present, past, future.

For Greek: Present, future, aorist, perfect.

ADVERB

Degree: As in adjectives

PREPOSITION

Simple, compound

A preposition with a substantive is to be called a *prepositional phrase*

CONJUNCTION

Simple, compound
Co-ordinating, subordinating
Correlative

COMMON TERM

Substantive: for noun, pronoun, infinitive (usually), gerund, supine

[1] The forms of the English past future and past future perfect, as in (*I knew that he*) *would write*, (*I knew that he*) *would have written*, should not be given in the paradigms of elementary books.

B. THE USE OF THE MATERIAL OF SPEECH

THE SENTENCE

Kind:
Affirmative, negative
Declarative, interrogative
Exclamatory, non-exclamatory
Simple, compound, complex

Subject:
Simple, compound
Complete subject, subject substantive

Predicate:
Simple, compound
Complete predicate, predicate verb

Clause:
Declarative, interrogative, assumptive
Principal, subordinate
Two or more principal or two or more subordinate clauses may be *co-ordinate.*
Functions of subordinate clauses:
- Substantive
  - Subject
  - Predicate nominative or accusative
  - Object
  - Appositive
  - With a preposition
- Adjectival
  - Descriptive
  - Determinative
- Adverbial

Relation of clause to its context:
Essential, non-essential

Conditional complex: Conditional clause with conclusional clause (condition+conclusion)

Kinds of conditional complex:

Present { Neutral / Contrary to fact

Past { Neutral / Contrary to fact

Future { More vivid / Less vivid } both neutral

Phrase: Substantive

Adjectival { Descriptive / Determinative

Adverbial

CHANGE OF FORCE IN THE PARTS OF SPEECH

A word commonly classed as one part of speech is sometimes used with the force of another.

When any part of speech other than a noun or pronoun has a case-construction in the sentence, it is to be called a *substantive.*

Certain words commonly classed as pronouns or adverbs may be used with purely introductory force, and are then to be called *expletives.*

RELATION OF ADJECTIVE AND PARTICIPLE TO SUBSTANTIVE

Adherent, appositive, predicate

ENGLISH CASE-USES

Nominative:	Subject
	Predicate
	Of address
	Of exclamation
	Absolute
Accusative:	Direct object
	Secondary object
	Retained object
	Cognate[1]
	Adjunct
	Subject of infinitive
	Predicate of infinitive
	Of exclamation (for the pronoun only)
	Adverbial
	With a preposition
Dative:	Indirect object
	Of reference or concern[1]
Genitive:	Of possession
	Of connection
	Subjective[1]
	Objective[1]
Any case:	In apposition

[1] Not important in the teaching of elementary English.

TERMS FOR CERTAIN ADDITIONAL CASE-USES IN GERMAN, LATIN, AND GREEK WHERE CURRENT NOMENCLATURE VARIES

For German, Latin, and Greek:	Of extent, duration, or degree
	Of the whole (or partitive)
	Of plenty or want
	Of composition or material
	Of application
	Explanatory
	Of separation
	Descriptive
	Of the charge
	Of cause or reason
For Latin and Greek:	Of possession (dative with verb meaning 'be')
	Of the penalty
	Of respect
	Of value or price
	Of origin
	Of comparison
	Of the measure of difference
For Latin:	Of purpose or tendency
	Of accordance

LEADING MOOD-IDEAS EXPRESSED IN ENGLISH BY MOOD-FORMS

Indicative:	Fact
Imperative:	Command
Subjunctive:	Volition
	Wish
	Condition contrary to fact

For the marked literary style add: Anticipation, obligation or propriety, ideal certainty, and indirectness

LEADING MOOD-IDEAS EXPRESSED IN ENGLISH BY AUXILIARIES

Indicative:	Fact (in the Future)	shall, will (according to person)[1]
	Capability / Possibility	can
	Permission	may
	Necessity	must
Subjunctive:	Anticipation	shall
	Volition	will, shall (according to person)[2] / let (1st and 3d persons)
	Wish	may, might
	Obligation or propriety / Natural likelihood	should, ought
	Possibility	may, might
	Ideal certainty	should, would (according to person)
	Less vivid future condition	should

An auxiliary with another verb-form is to be called a *verb-phrase.*

[1] Introduced for the sake of contrast with the volitive 'will,' 'shall.'

[2] In subordinate clauses, 'shall' in all persons.

ADDITIONAL TERMS FOR THE MORE IMPORTANT ENGLISH INDICATIVE AND SUBJUNCTIVE CONSTRUCTIONS

Of purpose; of result; of comparison; of cause; of concession; direct, indirect.

For use in advanced teaching add: Of advisability, necessity, and the like; softened statement; generalizing, particular.

THE GERMAN AUXILIARIES

The German modal auxiliaries correspond largely to the English: *werde* to "shall" or "will" (according to person), *kann* to "can," *mag* to "may," *soll* to "shall," etc.

TERMS FOR CERTAIN ADDITIONAL MOOD-IDEAS IN THE OTHER LANGUAGES

For German, Romance, Latin, and Greek: Attraction.

For German, Romance, and Latin: Fact as consecutive (of limited range in German and Romance).

For Romance: Feeling.

For Greek: Past point of reference.

TERMS FOR THE MORE IMPORTANT ADDITIONAL CONSTRUCTIONS INVOLVING MOOD IN THE OTHER LANGUAGES, WHERE CURRENT NOMENCLATURE VARIES

For German, Romance, and Latin: Of rejected reason; proviso; concession of fact, concession of indifference.

For German, Latin, and Greek: Of imaginative comparison.

For Romance and Latin: Limiting.

For Romance: Of anteriority; of mental reservation.

For French: *Que*-clause of added condition; introductory *que*-clause.

For Latin and Greek: Question of deliberation or perplexity; question for instruction; question or exclamation of surprise or indignation.

For Latin: Adversative; tacit or explicit; parallel; restrictive; of situation; of repeated action.

ADJECTIVE TERMINOLOGY FOR CERTAIN MOOD-IDEAS AND CONSTRUCTIONS

Adjective terminology may be used, if desired, in place of some of the names given on pages 327 and 328: Anticipatory, volitive, optative (meaning 'of wish'), potential (meaning 'of possibility or capability'), consecutive, comparative, causal, concessive. Thus one may say "anticipatory clause," "volitive clause," etc.

TERMS FOR THE MORE IMPORTANT TENSE-USES[1]

Absolute
Relative
Point of reference
Stage of action
Descriptive (or of situation)
Harmony of tenses
Attraction
Historical (present)
Habitual action
For Latin and Greek add: Attempted action

USES OF THE INFINITIVE IN ENGLISH

Substantive
In many of the case-relations indicated on p. 325
Adjectival
Adverbial, expressing various ideas, especially:
Application
Respect
Purpose
Result
Cause or Reason
Condition
Predicative

ADDITIONAL USES OF THE INFINITIVE IN OTHER LANGUAGES

Historical (Romance, Latin)
Of command (German, Romance, Greek)
Of wish (Greek)
Of proviso (Greek)

For Romance, infinitives with *à* or *de*, *a* or *di*, *á* or *de* are to be classed, in certain uses, as simple infinitives.

[1] Many of the distinctions indicated upon this page are not important in the teaching of elementary English.

PART II. DISCUSSION AND ILLUSTRATION

A. FOR ENGLISH

For many of the terms recommended in the foregoing tables discussion and illustration are unnecessary. There remains a considerable body of terms for which they seem desirable.

THE PARTS OF SPEECH

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The list of the parts of speech is put at the head of the treatment of the grammatical material as a matter of practical convenience only.

It is recommended that words be never dealt with as isolated units, but always in sentences. Many are, in fact, indeterminate when standing alone. Thus the word "enough," so standing, does not show whether it is adjective, or adverb, or substantive. It cannot be said that "enough," as a *word*, is any of these things; but a given "enough" in a sentence quite clearly shows its character.

In accordance with sound modern tendencies in teaching, the first process in grammatical analysis should be to deal with sentences as a whole, distinguishing *subject* and *predicate*, *principal* and *subordinate clauses*, etc., as indicated on page 323.

NOUN

Common, proper.—It is recommended that the distinction between *common* and *proper* be not asked for in the ordinary work of sentence-analysis, except where something in the thought of the sentence demands a recognition of the difference. The practice of requiring the one or the other term for every noun dealt with distracts attention from more important things, makes grammar work mechanical, and wearies the pupil.

Abstract, collective.—Similarly, it is recommended that the term *collective* be not used except where needed in explaining the occasional use of a plural verb with a singular noun, and that the term *abstract* be not used except where needed in explaining the significance of certain endings, or in the statement of other grammatical facts in certain languages. The distinction between abstract and non-abstract nouns is in many cases very difficult for even the specialist to make.

Masculine, feminine, neuter.—It is recommended that the distinction of gender be not dwelt upon in dealing with English nouns.

Case-forms.—The reasons for the choice of the terms *common form* and *genitive* for the case-*forms* will best appear after a discussion of the terms *nominative, accusative, dative, genitive* chosen for the case-*uses* (see p. 325). Four types of case-uses are generally and rightly recognized. They are commonly called "nominative," "objective," "indirect object," and "possessive." This nomenclature is not consistent. One should either have

terms of the same sort as "nominative" for the other three case-uses, or else have the term "subjective" for the first case-use. But the terms "subjective," "objective," "indirect object," and "possessive" are each too narrow. The term "subjective" applies properly to a noun used as subject, but not to a noun used as predicate after "is," or in direct address, or in exclamation, or in an absolute construction, as in "The *president* being absent, the vice-president took the chair." The name "objective" is not properly applicable to a noun used as subject or predicate of an infinitive, nor to a noun used adverbially, as in "He works many *hours* daily," nor to a noun used with a preposition. The term "indirect object" will hardly serve for "father" in "Spare your *father* such a grief." The term "possessive" is clearly wrong for the italicized nouns in "the *war's* delays" and "a *stone's* throw." The Committee recommends for these four types of case-uses the terms *nominative, accusative, dative, genitive.* Each of these terms is sufficiently colorless to cover all the varieties of case-use in question. The term *nominative of address* (see p. 325), proper for a name used in direct address, renders unnecessary the addition of the term "vocative" to the list of terms for case-uses. The four terms recommended are identical with those in universal use for German, Latin, and Greek. The treatment of English, considered quite by itself, will accordingly be helped by the use of the names proposed; while the pupil who passes to the study of a foreign language will be spared the necessity of taking up a discordant nomenclature.

These four types of case-uses, however, are not reflected, in the English noun, by corresponding varieties of case-form. The English noun has but two case-forms, one used when the function is nominative, accusative, or dative, the other used when the function is genitive. It seems clear that *genitive* is the proper name for the second case-form. A logical name for the first form would be "nominative-accusative-dative," but that name is obviously too long and complicated. In recognition of the fact that the form in question serves for three types of case-uses, the Committee recommends that it be called the *common form.*

The Committee recommends further that attention be directed, in the ordinary classroom work of analysis, to the *function* of a given noun in the sentence (see p. 325) rather than to its case-classification. For instance, in the analysis of the sentence "My father taught me *French*," it is more important that attention be directed to the fact that "French" is the *secondary object* than that it be directed to the fact that "French" is *accusative.*

The reason for the presentation of the case-uses in the order *nominative, accusative, dative, genitive* rather than in the order *nominative, accusative, genitive, dative* is that the dative relation is expressed in the same case-form as the nominative and accusative relations, whereas the genitive relation has a special case-form of its own.

PRONOUN

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Examples:

Personal: I, you, etc.
Possessive: mine, thine, his, hers, ours, yours, theirs, whose.
Demonstrative: this, that.
Interrogative: who, what, etc.
Relative: who, that, etc.
Indefinite: one, someone, any, anyone, no one, none, every one, each, another, the other, neither, both, etc.
Reflexive: myself, yourself, etc. (identical in form with the intensive).
Reciprocal: each other, one another.
Intensive: myself, yourself, etc.
Identifying: the same (as in "*The same* holds in other cases." *The same* is the only English identifying pronoun).

Substantive and adjective use of pronominal words.—A large number of pronominal words, under the classes *possessive, demonstrative, interrogative, relative,* and *indefinite,* are pronouns or pronominal adjectives according to the use made of them in a given instance. Thus, "*This* is a comfortable hat" (pronoun); "*This* hat is comfortable" (pronominal adjective); "*His* is good" (possessive pronoun); "*His* book is good" (possessive adjective).

Case-forms.—Whereas nouns have but one case-form for the nominative, accusative, and dative relations, most personal pronouns, together with "who" and its compounds, have two case-forms, one for the nominative relation, the other for the accusative and dative relations. These two case-forms (as "he," "him") are therefore named, respectively, the *nominative* and the *accusative-dative.*

Possessive pronouns and possessive adjectives.—English words like "my," "your," present a peculiar difficulty. About half of them ("my," "thy," "our," "your") are historically adjectives, like the corresponding German words, which are declined and agree with their substantives, like any other adjectives. Of the remainder, "his," "her," "its," "their," "whose" are genitives or were made upon the analogy of genitives. To try to distinguish the two classes by different names would be confusing, and could not succeed. These words must *all* be called adjectives, or *all* be called genitives of pronouns. Only three out of the nine in any way suggest case by their form ("my" looks no more genitive than "shy" and "cry" do, or "our" than "sour" and "flour" do); and even for these three the correspondence with the genitive is not complete in a single one. The name *possessive adjectives* would therefore seem the more appropriate. This is the one used in the more recent advanced books on English grammar, and is recommended in the Report of the English Committee. To adopt it is thus to fall in with the modern tendency, and at the same time to make the way easier for students of other languages, in which the corresponding words are for the most part unmistakable adjectives. When the English

words enumerated are called possessive adjectives, the mistake of writing "his" or "its" with an apostrophe will be less likely to be made, and the question why "whose" has a final *e* and no apostrophe will not be asked.

ADJECTIVE

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General division of adjectives.—The exact subdivision of adjectives presents grave difficulties. The scheme given is offered as practically right, and easily teachable.

Adjectives fall into two great divisions. One of these expresses the *kind* or *condition* of a person or thing spoken of, as in "*good* boy," "*sick* boy." The other, without expressing any idea of kind or condition, *limits the idea conveyed by the noun*, as in "*this* boy," "*what* boy?" or intimates the *absence* of limitation, as in "*any* boy."

To state the difference briefly and approximately, the first division answers the question "of what kind, or in what condition?" while the second answers the question "who, what, which?" The second class is thus made up of words of exactness or the opposite.

For the first division, the commonly used name *descriptive* is the best. The name "qualitative," which is sometimes employed, is not only in itself an unfamiliar word, but is too narrow to include adjectives of condition. For the second, the name *limiting* seems to be the best that can be found, it being understood that a very considerable variation may exist in the degree of limitation expressed.

Common, proper.—These divisions correspond to the divisions similarly named for nouns. Thus "winter" and "wintry," common noun and adjective; "Russia" and "Russian," proper noun and adjective.

Pronominal.—Examples:

Possessive: my, thy, his, her, its, our, your, their, whose.
Demonstrative: this, that.
Interrogative: what, which, etc.
Relative: which, whose.
Indefinite: some, any, no, every, each, other, neither, both, etc.
Intensive: very.
Identifying: same.

When the possessive adjective stands in the predicate, the forms are *mine, thine,* etc., like those of the possessive pronoun. E.g., "This pen is *mine.*"

Superlative, relative and absolute.—The superlative of the adjective means that the quality denoted exists in the highest degree in the person or thing described. When this means "in the highest degree out of all the persons or things concerned," as in "John is the most considerate of all my friends," the superlative is to be called *relative.* When it means "in a very high degree," as in "John is most considerate," the superlative is to be called *absolute.*

VERB

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Transitive, complete, linking.—In recommending these terms the committee has been governed by the belief that it is practically better to classify verbs according to the actual use made of them in given sentences than to classify them according to the possible uses that might be made of them. Thus, it is better to say of "writes" in "He writes for a living" that it is "an intransitive verb" than to say that it is "a transitive verb used intransitively" or "a transitive verb used absolutely."

In practice, after the distinction between transitive and intransitive verbs has been completely grasped, the natural form of question in dealing with a given verb would be, "Is this transitive, complete, or linking?" rather than, "Is this transitive or intransitive, and, in the latter case, is it complete or linking?"

Examples:

Transitive: "He observes everything."
"He writes stories."

Intransitive:

Complete: "He observes carefully."
"He writes for a living."
"He grows fast."

Linking: "He is observant."
"He appears observant."
"He becomes observant."
"He grows observant."

Many verbs are capable of being used with either transitive or complete force, as "teach," "write." Others are capable only of complete force, as "vanish." Others are capable of either complete or linking force, as "appear." Others are capable only of linking force, as "seem." Some are capable of all three forces, as "grow."

Regular and irregular conjugation.—English verbs might be classified, on an historical basis, as "weak," "strong," and "irregular." But inasmuch as the strong verbs form so small a class, it seems best to adopt the simpler classification *regular, irregular.*

Progressive conjugation:

"John *is writing, was writing, will be writing, has been writing,*" etc. There is a progressive form for each tense.

Special interrogative, negative, and emphatic forms of present and past (with the auxiliary "do"):

Interrogative: "*Do* you *speak* Chinese?"

Negative: "I *do not speak* Chinese."

Emphatic: "You say that I don't believe that story: I *do believe* it."

Impersonal verbs: "It *is raining.*"

Modal forms (always predicative), and non-modal forms (non-predicative).—Every definition of a sentence or a clause assigns to each, as a necessity, a subject and a predicate. From this definition, upon which all workers in grammar are agreed, a number of important consequences in nomenclature follow, two of which belong under the present head.

It is recognized that, in English, only an indicative, imperative, or subjunctive can constitute, or help to constitute, the predicate essential to a sentence or clause. But these are the *moods*, or *modal forms*. The moods or modal forms, accordingly, are the *predicative* forms.

The other forms in general, as the gerund or the participle, do not predicate, though they often *imply* predication. A sentence or clause cannot be made with them. They are accordingly, in general, *non-predicative*.

One of the non-predicative forms, however, does gain predicative power in certain constructions, as in "I believe *him to be honest*," which is an indirect way of saying, "*He is*, in my opinion, *honest*." In such a sentence, accordingly, a group of words like "him to be honest" may properly be called an *infinitive clause*.

Other consequences following from the accepted designations *subject* and *predicate* appear below in the discussion of page 323.

Gerund.—The form is identical with that of the participle, but its office is quite different, and a distinct name is therefore necessary. The form is sometimes interchangeable with the infinitive (thus "seeing is believing"="to see is to believe"), but in the main the two are used quite differently, and it is better, therefore, not to name the form in question as a variety of the infinitive. The common name *gerund* seems satisfactory. Example: "By *persevering* we shall succeed."

Words which originated as gerunds or participles are to be classed as nouns or adjectives when the verbal force no longer predominates.

Noun: "*Reading*, *writing*, and arithmetic are coming into respect again."

Adjective: "Your sister is a *charming* girl."

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Tense.—The principles which have guided the Committee in its recommendation of tense-names are as follows:

1. Whatever principle of naming is adopted should be consistently maintained.

2. The name of each tense should, if possible, carry a natural and practically sufficient meaning, appropriate to that tense and to no other.

3. Such tenses as possess a common element and elements of difference should have names that will indicate both these facts.

4. Where a given form does not distinguish between two or more tense-meanings of which it is capable, that form, *as such*, should bear but a single name.

The following-out of these principles leads, for the English indicative, imperative, and subjunctive, to the tense-names recommended by the Committee. Thus, since we say "present" and "future," we should say *past*, not "imperfect," and since we say "present perfect" and "future perfect," we should say *past perfect*, not "pluperfect."

The names *past future* and *past future perfect* are formed on the same model as "present perfect," "past perfect," and "future perfect." As "past perfect" means "perfect in the past," so *past future* means "future in the past," that is, "future from a past standpoint." The same reasoning holds for the *past future perfect*. These two tenses are in extremely common use, but there have been no established names for them in our school grammars. Examples are: "I felt sure that it *would rain*"; "I felt sure that he *would* not *have arrived* when we got here."

For the infinitive and participle, the same principles are to be maintained as are laid down for the indicative, imperative, and subjunctive. The infinitive and participle express time only relatively. If, then, we retain for the English infinitives and participles the name *present*, meaning relatively present, it will follow that the other tense, which means relatively past, should be called the *past*, not the "perfect." The use of these terms, *present* and *past*, will at once simplify the teaching of the forces of the tenses. Thus we shall say that, in "He was understood *to be* sick," the present infinitive "to be" expresses time *relatively present* to that of the principal verb "was understood," while in "He was understood *to have been* sick," the past infinitive "to have been" expresses time *relatively past* to that of "was understood."

This consistent principle of naming being accepted, it is necessary to provide distinctive names for the two forms of the English past participle, as seen for example in "written" and "having been written." The Committee recommends that a form like "written" be called the *past participle* and that a form like "having been written" be called the *phrasal past participle*. These names will be seen to have the advantage of implying that the difference between the two forms is not one of essential meaning, but only one of greater brevity or greater fullness of expression.

ADVERB

Adverbs used to introduce questions and adverbs used to introduce subordinate clauses are to be called respectively *interrogative* and *relative* adverbs, in accordance with the nomenclature employed for the corresponding classes of pronouns.

COMMON TERM

Substantives and words used substantively (*See page 324*).—The eight familiar names employed above (*noun*, *pronoun*, *adjective*, etc.) give us a sufficient means of distinguishing among the individual classes of words, according to their distinctive nature. But the names fall short in failing

to note a *common* nature possessed constantly by the noun, the pronoun, and the gerund, and usually by the infinitive, and occasionally taken on by other parts of speech (for instance *adjective* and *adverb*). This common nature consists in the power of expressing something (person, thing, etc.) about which the speaker is thinking, and about which a predication may, if desired, be made. It is best designated by the well-established and familiar word *substantive*. Thus we may speak of all nouns and pronouns as substantives, and we may speak of an adjective, an infinitive, or an adverb, when so used as to share the substantive nature, as an adjective, infinitive, or adverb, *used substantively*. Substantives of any kind are necessarily in some case-relation in the sentence, as in the following:

Noun: *Rest* is sweet.
Pronoun: *He* is weary.
Gerund: *Resting* is *gaining* strength for the future.
Infinitive: *To rest* is sweet.
Adjective: "The *good* die young."
Adverb: "An eternal *now*."

It is obvious, too, that every *subject* must be substantive in character. In condensed form we may accordingly say: *Sentence* or *clause* = *substantive* + *predicate*.

The Committee prefers the term *substantive* to the term "noun," in describing uses like those discussed above. To say that "weary" in the third sentence is a noun, or that "to rest" in the fourth is a noun, or that "now" in the last is a noun is to ignore the clear adjectival feeling which persists in "the weary," the clear infinitive feeling which persists in "to rest," and the clear adverbial feeling which persists in "now."

THE SENTENCE

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Declarative, interrogative; exclamatory, non-exclamatory.—These terms have to do with the classification of sentences, and the divisions differ from those now current, namely "declarative," "interrogative," "imperative," "exclamatory."

In the current system, the examples of the exclamatory sentence are of the type seen in "How cold it is!" Wishes, requests, and the like are reckoned under the "imperative." The term "declarative," as explained in the manuals and illustrated by examples, means "declaring that something is a fact." It thus stands for "declarative indicative." The actual division is accordingly into:

A. Declarative indicative
B. Interrogative
C. Imperative (including wishes, etc.)
D. Exclamatory

The scheme is defective in many ways.

1. It fails to explain a good deal of the actual punctuation found in the texts read in the schools, as in "Beware!" and "I'm killed, Sire!" The first sentence is imperative, the second declarative indicative, and yet both have exclamation points.

2. The scheme is not symmetrical. Thus "Has he come?" and "Shall he go?" both fall under "interrogative," because they both ask a question, and for no other reason. But the corresponding non-interrogative sentences, "He has come" and "Let him go," do not similarly fall together, but pass, the one under "declarative," the other under "imperative." It follows that some other consideration than that of the non-interrogative character of the sentences has played a part here, and the scheme is accordingly not harmonious with itself.

3. It does not cover all sentences. It embraces three mood-ideas, fact, command, and wish, but omits many others. Thus such sentences as "It might have been," "This would be folly," find no place in it. It accordingly fails of its express purpose, to cover all sentences.

4. The classes are not mutually exclusive. Thus "Let him write" is clearly imperative, and finds its proper place. "Shall he write?" on the other hand, while clearly interrogative, is also clearly imperative. It is a *question* as to what is to be *commanded*. It will accordingly go under *two* heads, and is not completely covered by either.

5. The classes are not homogeneous. Thus "imperative" is a mood-class, but "interrogative" and "exclamatory" are not. No one has ever put them among the moods in writing a grammar, or could think of doing so. The scheme is drawn up on the basis of distinctions of two kinds of ideas, having absolutely no relation to each other—as unlike each other, to make a comparison, as sex and stature are. And neither idea is carried out. It is as if all mankind were to be divided, not into male *and* female, nor into tall people *and* short, but into *males* and *tall people*.

And the case is even worse than this, since the first category, which really is declarative *indicative*, puts together parts from two different orders, one of the mood-kind, one of the other kind. It is as if, then, we divided all human beings into: (1) *tall males* (sex and stature), (2) *males* (sex), (3) *tall people* (stature).

The fact that the distinctions are of entirely unrelated kinds is the cause of the defective working of the scheme. We have accordingly to adopt the one kind or the other, and carry it out. But we already have in our grammars a treatment of the moods. What is wanted here, accordingly, is to carry out the ideas seen in "interrogative" and "declarative."

"Interrogative" means, in simple language, *asking*. The opposite of asking is *telling*. The speaker, in uttering any sentence, necessarily brings in a mood-idea; for there can be no sentence without a predicative verb, and every predicative verb is in *some* mood, and carries *some* mood-idea.

The speaker either *tells* his own mood-idea, or *asks* whether the mood-idea which he puts in his question is that of his interlocutor. But this is all, so far as the class to which "declarative" and "interrogative" belong is concerned. The two divisions are exactly opposed, and there is nothing that stands between them. We have only, then, to empty the word "declarative" of the association which it has had with the idea of fact *alone*, and apply it to all uses in which the speaker expresses his mood-idea. It is as legitimate to speak of a declaration of the speaker's *will* or *wish*, as to speak of a declaration of the speaker's perception of fact.

Some grammars have recognized that the class "exclamatory" is not of the same rank with the other three classes. But it has not been recognized that it is in no sense opposed to them. The idea of exclamation or the opposite (non-exclamation) turns on the degree of excitation of the speaker's feeling. If he is indifferent, or self-controlled, the sentence is not exclamatory. If his feeling rises above the degree naturally belonging to the contents of his sentence, then the sentence is exclamatory. This is why declarative and imperative sentences are often punctuated with exclamation points, and questions (rhetorical) occasionally, as in "Why in the world did you do that!" Emotion may even be centered upon a clause, or a phrase, or a single word, and the exclamation point will then follow.

The common conception has been that every sentence fell into one *or* another of the four categories declarative, interrogative, imperative, exclamatory. The sound conception is that every sentence carries three ideas, *coexisting* in it, as size, weight, and color coexist in every material object. Every sentence (1) tells *or* asks (2) one *or* another mood-idea (3) with non-exclamatory *or* exclamatory feeling. One type of sentence only shows exclamatory feeling by the form, namely, the one seen in "How cold it is!"

When nouns are wanted in place of the adjectives above, *declaration* should be used to correspond to *declarative*, *question* to correspond to *interrogative*, and *exclamation* to correspond to *exclamatory*.

Questions are of two kinds, *yes- or no-questions*, as in "Shall we send someone?" and *questions of detail*, as in "Whom shall we send?"

Instead of speaking to another person, one may frame sentences of any kind for oneself alone. But such a use requires no special nomenclature.

For the occasional use of an independent sentence to express an assumption, see below under declarative, interrogative, and assumptive clauses.

Simple, compound, and complex sentences:

Simple: John was made president of the class.

Compound: John was made president of the class, and his friends were much pleased.

Complex: John was made president of the class, because he was clearly the most competent person.

Simple subject, compound subject; simple predicate, compound predicate:

Simple subject: "*John* was elected."

Compound subject: "*John and George* were elected."

Simple predicate: "John *rows well.*"

Compound predicate: "John *rows and sails well.*"

Complete subject, subject substantive; complete predicate, predicate verb.—However long the complete subject may be, it must contain a substantive part, which stands in immediate connection in thought with that which is predicated. This part should therefore be called the *subject* SUBSTANTIVE. Similarly, however long the complete predicate may be, it must contain a verb. This part should therefore be called the *predicate* VERB.

Illustrations:

Complete subject: "*The stately ship* dropped her anchor."

Subject substantive: "The stately *ship* dropped her anchor."

Complete predicate: "The stately ship *dropped her anchor.*"

Predicate verb: "The stately ship *dropped* her anchor."

Declarative, interrogative, and assumptive clauses.—As a sentence may declare or inquire, so a clause may declare or inquire. Thus in "I love him because I trust him" the subordinate clause is *declarative*, and in "You ask me whether I trust him" the subordinate clause is *interrogative* (indirect question).

But there is a third possibility, in which the subordinate clause neither declares nor inquires, but *assumes* (supposes). Thus the introductory clause in "If I killed him, I killed him justly; but I did not kill him," neither declares that I killed him, nor asks whether I killed him, but for the moment *assumes* that I killed him, in order that something else may be predicated as holding good *if* the assumption holds good. The third possible office of the subordinate clause is accordingly an *assumptive* one.

What are technically called *conditions* (clauses with "if," "if not," or "unless") constitute one form of assumption. But there is also another form, in which the subordinate clause is introduced by a relative of some kind, as in the coward's motto, "He *who fights and runs away* may live to fight another day." The effect is the same as if we said, "Supposing a man to fight and run away, he may live to fight another day." The presence of an antecedent is not necessary. Thus "*Who steals my purse* steals trash."

Independent sentences may also, though declarative or interrogative in form, be assumptive in effect. Thus in "somebody *says* 'no,' so do I; somebody *says* 'yes,' so do I," the sentence "somebody says" = "supposing somebody to say . . ."

Principal and subordinate clauses:

"*Mary, who studies music with Miss Brown, plays well.*"

"*Mary plays well*" is the principal clause; "*who studies music with Miss Brown*" is the subordinate clause.

Co-ordinate principal clauses:

"*Mary*, who studies music with Miss Brown, *will play your accompaniment, and she will be glad of the opportunity.*"

Co-ordinate subordinate clauses:

"Mary, *who studies music with Miss Brown, and who has practiced faithfully for many years*, plays well.

Substantive clauses:

Subject: "*That he should do this* surprises me."

Predicate nominative: "The truth is *that he is careless.*"

Predicate accusative: "I found it to be *what I wanted.*"

Object: "I heard *that he was ill.*"

Appositive: "There is one good reason for excusing him: namely, *that he didn't foresee the consequences of his act.*"

With a preposition: "I spoke of *what he had done.*"

Adjectival clauses.—Just as adjectives are of two strongly differentiated kinds, the descriptive and the limiting, so are adjectival clauses. It is therefore no more a sufficient disposition of an adjectival clause merely to call it such without discrimination, than it would be to throw together words like "good," "this," "that," "a," "the," "any," calling them simply "adjectives."

Among the limiting clauses, the one in most frequent use is the *determinative* clause, that is, the one which *makes exactly known.* This is the clause which tells *who*, *what*, or *which* is meant by the antecedent to which the relative clause is attached. It is like the definite article and the demonstrative pronoun in its effect. If there were as many demonstrative pronouns as there are or ever have been objects in the world, there need never have been any determinative clauses. But as things are, any object of which the speaker is thinking can be designated by the help of a determinative clause. Examples may be seen in: "Let me see the book which you have just bought," "I want the variety of peas which you sold to John Smith last year."

It often happens that the same facts may be used in an adjectival clause, either to describe or to determine. Thus:

Descriptive clause: "There are students in this school *who do their work well day by day*" (=steadily industrious students).

Determinative clause: "Those students in this school *who do their work well day by day* are excused from examination" (=*the* steadily industrious students).

The descriptive clause is in effect a big descriptive adjective, the determinative clause a big demonstrative adjective.

The descriptive clause is often foretold by "a," as in "There is a boy who . . ." For the corresponding plural form, as in "There are boys who . . . ," there is no foretelling word.

The determinative clause is foretold by "the," "this," "that," or stands without special introductory word.

The determinative clause, though extremely common, and corresponding to a type of pronouns everywhere named and explained, has in general not been noted in grammars. A few, however, have noted it, under the name "restrictive clause." But this name is less exact than the name *determinative*. It implies that the clause *restricts* the application of the antecedent; that is, that it refers to a *part* of the antecedent, not the whole. It does not do so. The clause is *identical* in application with the antecedent, and merely explicates it. It would be a just name only if we called the demonstrative pronouns "restrictive pronouns."

It is clear that the ordinary office of the definite article, the demonstrative pronoun, and the determinative clause is the same—to *designate* what is meant. The same name might be applied to all. But it would not be well to use the name "demonstrative clause" in place of *determinative clause*, since the very reason why the clause is used is generally because the object designated is too remote to be pointed at. The same objection holds often to the name *demonstrative pronoun*. The name *determinative*, on the other hand, could be applied equally well to the article now called *definite*, the pronouns now called *demonstrative*, and the clause under discussion. But the Committee felt that the first two terms would continue to serve, and were perhaps too firmly established to be changed at present. In this place the Committee has not put into operation its guiding principle of applying the same name to all mechanisms of expression that have the same function.

Adverbial clauses:

"*When he had finished his work*, he went home."

"*Since we cannot agree*, let us agree to differ."

Essential and nonessential clauses.[1]—A subordinate clause may be essential to the expression of the thought of the clause on which it depends. Such a clause properly has no comma before it. On the other hand, a subordinate clause may be nonessential to the expression of the thought of the clause on which it depends. Such a clause is usually set off by punctuation from the principal clause. According to the nature of the relation of a nonessential clause to its principal clause it may be called *free, loosely attached, forward-moving, or parenthetical.*

[1] Not important in the teaching of elementary English.

Examples:

Essential: "There are boys *that work without being driven.*" The relative clause "that work without being driven" could not be omitted without leaving the thought in the clause "there are boys" incomplete.

"What is the name of the architect *who designed your house?*"

"It is probable *that there will be trouble.*"

Free: "Mr. Smith, *who was in town last week,* is a friend of mine." The relative clause could be omitted without leaving the thought in "Mr. Smith is a friend of mine" incomplete.

Loosely attached: "Thus, therefore, he went back, *if haply he might find his roll.*" The condition is not accompanied by any conclusion, but is loosely attached to the principal verb.

Forward-moving: "We threw the drowning man a rope, *which he clutched with both hands.*" The clause carries the story forward, just as a co-ordinate sentence introduced by a conjunction might do (*which he clutched = and he clutched it*).

Parenthetical: Mr. X was elected representative (*this was in 1890*), and, six years later, governor of the state.

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Conditional complex.—The terms *condition* and *conclusion*, commonly employed in grammars of the modern languages, seem to the Committee unquestionably better than the terms "protasis" and "apodosis," generally employed in Latin and Greek grammars published in this country. The words *condition* and *conclusion* have a familiar English sound. The first, at any rate, is already within the vocabulary understood by the young student, and the second will easily follow after. On the other hand, the terms "if-clause" and "then-clause," which have been proposed, do not seem to promise the relief which the substitution of these phrases for really descriptive names was meant to afford. Further, the term "then-clause" is not applicable, without an additional effort of mind, when the condition begins with "unless."

If the terms *condition* and *conclusion* are adopted, it follows that the adjective form of the name for the clause expressing the condition should be *the conditional clause*, and that the adjective form for the name of the conclusion should be *the conclusional clause.*

The complex sentence made up of a condition and a conclusion differs in one fundamental respect from other complex sentences. *The principal clause is not, as in other combinations, valid by itself alone.* What is declared is not the validity of the conclusion, but *the existence of an unbreakable bond* between the condition and the conclusion, so that the second cannot be taken without the taking of the first also. To emphasize the conception

that a complex sentence of this type must be taken as a whole, the Committee recommends the name *conditional* COMPLEX.

Two elements are simultaneously present in the thought in each part of the conditional complex, (1) that of reality or non-reality, and (2) that of time. One or the other must be made the basis of classification. The second seems the easier for the student to build upon, since the distinctions *past, present, future* are familiar to him thru constant use elsewhere.

In the present or past, the condition and conclusion may imply nothing with regard to the truth of either, or may imply that either or both are untrue. For these two ideas respectively, the Committee recommends the names *neutral* and *contrary to fact.*

All future conditions and conclusions are necessarily neutral, for the very reason that they deal with acts or states not yet realized. It is therefore not the aspect of neutrality that should be denoted in the working names, but the differences within the field of a common reference to the future. These differences do not lie in the ideas of "probability" or "improbability," which are commonly assigned to them. When one says, "If it should be raining when we reach X, we shall put up for the night; if it should not be raining there, we shall keep on," one does not picture both the raining and the not-raining as improbable. Neither is the difference one of "contingency" and "non-contingency." *All* future conclusions, no matter what the kind may be, are contingent upon their conditions. The difference between the types lies simply in the greater or lesser vividness of the conception.

Present { *Neutral:* "*If he is doing this, he is in the right.*"
Contrary to fact: "*If he were doing this, he would be in the right.*"

Past { *Neutral:* "*If he did this, he was in the right.*"
Contrary to fact: "*If he had done this, he would have been in the right.*"

Future { *More vivid:* "*If he shall do this* (or *If he does this*), *he will be in the right.*"
Less vivid: "*If he should do this, he would be in the right.*"

The condition and conclusion may of course be in different times. Thus "if he did this (*neutral past condition*), he is in the right" (*neutral present conclusion*).

It will be noticed that the neutral condition in the present or past is always an assumption of fact.

Phrase:
Substantive: "*From New York to San Francisco* is a long way."
Adjectival: { *Descriptive:* "A man *of high standing.*"
Determinative: "The chair *in the corner.*"
Adverbial: "*Of a sudden,* a noise arose."

CHANGE OF FORCE IN THE PARTS OF SPEECH

Words used with unusual force:

"The *above* statement" ("above" is ordinarily an adverb).

Expletives:

"*It* is easy to talk."

"*There* were many people in the room."

"It" as expletive should be carefully distinguished from the true pronoun "it" used as an impersonal subject, as in "It is cold," or as a colorless substantive, as in these sentences:

"*It* is the first of January." ("It" is colorless for "this day.")

"*It* was John that did it." ("It" is colorless for "the man"; the presence of the relative shows that the "it" is not expletive.)

RELATION OF ADJECTIVE AND PARTICIPLE TO SUBSTANTIVE

Adherent, appositive, predicate.—Most grammars recognize but two relations of the adjective to the word to which it belongs, namely the "attributive" and "predicate" relations. In using the word "attributive," the writers have in mind the relation of *close connection* of the adjective with its noun, as in "the hungry child."

But there is still a third relation of the adjective, which is neither that of "attribution" nor that of predication, as in "The boy, careless and indifferent, paid no attention." This relation is precisely the same as that of the appositive noun, as in "The boy, a member of another school, paid no attention when the bell rang"; and it should therefore bear the same name, *appositive.* It already does so in several English grammars.

The three relations for the adjective are thus (if we accept for the moment the current names) the "attributive," "appositive," and "predicate" relations. The first is a close connection, in direct attachment, to the noun, the second a looser connection, thru a mere adding to the noun, the third a close connection made thru the medium of the verb.

The second and third terms express the relation satisfactorily; the term "attributive" does not. It does not in itself suggest any idea of closeness of attachment. Its natural meaning is in fact such that it would apply equally well to all three relations. It properly means "expressing an attribute"; and this it does, no matter what the relation to the noun may be. Thus in "John is *diligent*," the attribute "diligence" is certainly predicated of John. In other words, the term "attributive" expresses the inherent nature of the idea conveyed by the word used, and not the way in which that idea is framed into the sentence.

In place, then, of the term "attributive," as at present employed, the Committee recommends the word *adherent.* This conveys the idea of *closeness of connection.* And, if the pupil or teacher should also suggest the word "adhesive," and the class should think of paste or mucilage, the conception would be helped, not hindered.

In France, the word "attribut" (properly meaning the same as our "attributive") is regularly employed where we use the word "predicate" (thus in "John is *good*"). This is as defensible as our use of "attributive" in the other sense, since all adjectives are attributive; but the term, wherever used for the relation of the adjective to its substantive, is defective, as has already been shown.

The name for the adherent relation in general use in France is "épithète." The English Committee, in order to obtain harmony with the French Ministerial Circular, has adopted the term "epithet" in place of the term "attributive." But harmony is still not reached; for the English Committee has adopted the terms "epithet" and "predicate," while the French Circular has adopted the terms "épithète" and "attribut." Moreover, the term "epithet" or "épithète" would not appear to be good in itself, since the common use of the word in either language is in the sense of a fixed description occurring even where it has no special bearing, as in "Then the *swift-footed* Achilles made answer." Further, the word is defective in not expressing the thing most desirable to name—the nature of the connection of the adjective with its noun.

The relations of the participle to its substantive are like those of the adjective.

CASE-USES

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Nominative:

Subject: "*I* saw him."
Predicate: "It is *the king*."
"He seems to be *the leader*."
Nominative of address: "*John*, come here."
Nominative of exclamation: "O *the wretch!*"
Nominative absolute: "*This* done, he went away."

Accusative:

Direct object: "I saw *him*."
Secondary object: "My father taught me *French*."
Retained object: "I was taught *French* by my father."
Cognate accusative:[1] "I slept *a long and heavy sleep*."
Adjunct accusative: "The class elected John *president*."
"We painted the house *white*."
Subject of infinitive: "He believes *me* to be the author."
Predicate of infinitive: "He believes me to be the *author*."
Accusative of exclamation: "O unhappy *me!*"
Adverbial accusative: "He works *many hours* daily."
"He plays golf *every day*."
"They bound him *hand and foot*."
Accusative with a preposition: "The man behind *the gun*."

[1] Not important in the teaching of elementary English.

Dative:

Indirect object: "My father has given *me* a boat."
Dative of reference or concern:[1] "Spare *me* my child."
"I'll rhyme *you* so eight years together."

Genitive:

Genitive of possession: "*John's* bicycle."
Genitive of connection: "The *war's* delays."
Subjective genitive:[1] In *Adam's* fall, we sinned all" (Adam fell).
Objective genitive:[1] "*Lincoln's* election" (the people elected Lincoln).
"A *stone's* throw."

Notes on some of the above uses.

Nominative and accusative of exclamation.—Both the nominative and the accusative of the pronoun are found in exclamations. The same is true of nouns in the languages which distinguish the nominative and accusative by difference of form; but, since English does not do this, it seems best to class the indeterminate noun-form in exclamation as nominative.

Genitive of connection.—The idea is an outgrowth from the possessive idea, but has come to the point where a special term is necessary. "The war's delays" means "The delays connected with the war." It could not reasonably be said to mean "The delays possessed by the war."

LEADING MOOD-IDEAS

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In the Anglo-Saxon period of English, the subjunctive had as large a range as is found in any language. But auxiliaries were already coming into use, to differentiate the mood-ideas more finely. The auxiliaries gained upon the subjunctive, and in the ordinary English of the present day this mood is limited to the expression of volition, wish, and condition contrary to fact. In these, though often replaced by auxiliaries in the first two cases, the mood is still in full life. Thus:

Volition: "I move that John Smith *be made* president of the class."
Wish: "Heaven *help* him!"
Condition contrary to fact: "If he *were* here, he wouldn't accept."

In the marked literary style, including much that is written in the daily papers and the popular magazines, the subjunctive is still in occasional use to express: volition, in types from which it has dropped out in ordinary speech or writing; anticipation; obligation or propriety, after an introductory word conveying the idea; ideal certainty (that is, certainty in a purely imaginary case); and indirectness. Thus:

[1]Not important in the teaching of elementary English.

Volition: "Let us begin, and carry up this corpse, singing together. *Leave* we the common crofts, the vulgar thorpes" (Browning).
"This *be* the verse they grave for me" (Stevenson).
"But to act that each tomorrow *Find* us further than to-day" (Longfellow).
Anticipation: "Before this solid flesh *decay*" (A. E. Housman).
Obligation or propriety: "It is proper that this *be done.*"
Ideal certainty: "Love *were* clear gain" (Browning).
Indirectness: "When I ask her if she *love* me . . . . " (Tennyson).

In the times of Shakespeare and the King James translation of the Bible, the subjunctive was still in large use, alongside of the auxiliaries. Thus: "Here will I stand till Caesar *pass* along" (Shakespeare, *Julius Caesar*, II, iii, 11; anticipation). "Sir, come down ere my child *die*" (John 4:49; anticipation). "Go bid thy mistress when my drink is ready she *strike* upon the bell" (Shakespeare, *Macbeth*, II, i, 31; volition).

A number of forces which were once in unrestricted use have still survived, in our daily speech, in fixed expressions, as in "*be* that as it may," "*suffice* it to say," "she will be twenty *come* Christmas."

But in the main the subjunctive has given way to the auxiliaries. In these, English possesses a fuller inflection for mood-ideas than any other language except German, in which the situation is substantially parallel. For us, accordingly, the observation of the forces of the English auxiliaries forms the best starting-point in the study of mood-ideas.

The table that follows gives illustrations of both kinds of mood-expression, with distinction of common and literary use.

In the lower half of the table the anticipatory subjunctive and auxiliary are placed first in order to bring together the classes "volition" and "wish," which approach each other, tho distinct. The idea of volition is stronger, and, in its fullest force, suggests determination to bring about the act mentioned. The idea of wish is weaker, and, in its normal force, expresses something which lies outside the speaker's control. In the parent speech from which our language has come down, the two ideas were expressed by entirely distinct moods, the mood of volition or anticipation being the "subjunctive," and the mood of wish, together with the remaining forces, being the "optative." But the fact that the two moods lay near each other in force led in time to the coming together of the two in a single system of mixed forms, or to the complete or nearly complete triumph of the one at the expense of the other.

The mood-ideas beginning with wish are so arranged that each stands next to the one which most closely approaches it, except that possibility and ideal certainty approach equally near to natural likelihood. The order thus effected puts the condition contrary to fact and the less vivid future condition in immediate succession to ideal certainty, which is the mood-idea of the corresponding conclusional clauses.

Independent Subjunctive Ideas, as expressed by:

Mood-forms	*Auxiliaries*
Volition ("Everyone *rise*")	Volition, 'will' (1st pers.), 'shall' (2d and 3d pers.) ("Thou *shalt* not *kill*")
Wish ("God *bless* you")	Wish, 'may' ("*May* God *bless* you")
	Obligation or propriety, 'should,' 'ought' ("Everyone *should rise*")
	Natural likelihood, 'should,' 'ought' ("He *should make* a good teacher")
	Possibility, 'may,' 'might' ("It *may rain*")
Ideal certainty[1] ("That *were* terrible")	Ideal certainty, 'should' (1st pers.), 'would' (2d and 3d pers.) ("That *would be* terrible")

Dependent Subjunctive Ideas, as expressed by:

Mood-forms	*Auxiliaries*
Anticipation[1] ("Before he *come*")	Anticipation, 'shall' ("Before he *shall come*")
Volition ("I insist that he *do* it")	Volition, 'shall' ("I insist that he *shall do* it")
Wish ("My wish is that he *have* all success")	Wish, 'may' ("My wish is that he *may have* all success")
Obligation or propriety[1] ("It is right that he *do* it")	Obligation or propriety, 'should,' 'ought' ("It is right that he *should do* it")
	Natural likelihood, 'should,' 'ought' ("There are many reasons why he *should make* a good teacher")
	Possibility, 'may,' 'might' ("It is possible that he *may make* a good teacher")
	Ideal certainty, 'should' (1st pers.), 'would' (2d and 3d pers.) ("I am sure that he *would fail*")
Condition contrary to fact ("If he *were* here")	Less vivid future condition, 'should' ("If he *should try*")
Indirectness[1] ("I wondered if it *were* true")	

[1] In the marked literary style.

The volitive subjunctive and the volitive auxiliary "shall" may be spoken of as expressing what is *wanted* or *not* wanted, the anticipatory subjunctive and the anticipatory auxiliary "shall" as expressing what is *looked forward to, seen as impending*. It should be noted that the anticipatory subjunctive approaches the future indicative in force, and the volitive subjunctive the imperative. The anticipatory "shall," common enough in the subordinate clause, is found today in the principal clause in one use only, which may be called the "prophetic" use, as in "Then *shall* the righteous shine as the sun."

The word *potential*, if used, should be confined to the ideas of possibility and capability. The common use of it as covering also the ideas of obligation and ideal certainty has no justification in the meaning of the word, and simply hides actual distinctions which the auxiliaries obviously express.

The indicative auxiliaries for the future, "shall" in the first person and "will" in the second and third, are given in order to present the contrast with other auxiliaries, especially "shall" of anticipation, and "would" of ideal certainty. Thus "The president will veto this bill if passed" and "The president would veto this bill if passed" both refer to the future, and differ only in the mood-idea, the first representing the vetoing as a future fact, in case the bill is passed, the second representing it as equally certain under the same circumstances, but as *kept within the limits of the imagination*.

The term *volition* has been preferred to the term "will," its practical equivalent, both because an adjective can be made for the former and not for the latter, and because it would be confusing to say that "will in the first person is expressed by 'will.'"

The terms *anticipation* and *anticipatory* have been chosen as not only well expressing the idea to be conveyed, but as matching each other, and having at their side also an available verb *anticipate*. The term "prospective"—in itself good—would not match the term *anticipation*. Nor could the verb "prospect" be employed to match "prospective."

The term *of indirectness* has been preferred to the term "of indirect discourse" for three reasons: (1) It is briefer. (2) The word "discourse" implies a formal style of speech which is not necessary to the construction under discussion. (3) The term *of indirectness* fits cases after verbs of thinking as well as after verbs of saying, while the term "of indirect discourse" always implies speech, and accordingly sets up a mechanical conception of the construction in the student's mind.

Besides the leading ideas of the moods, now set forth and named, there are various shaded forces. Thus, the imperative and the subjunctive may express not precisely command, volition, or wish, but the closely neighboring ideas of *request* or *consent*, as in "*Write* to me, please," "*Have* it as you will," "*Be* it as you please," "I am willing that he *try*." The imperative and subjunctive may also express not literal but *imaginative* command or volition, as in "*Seek*, and ye shall find" (="*if* ye seek"), "Man gets no other light, *search* he a thousand years" (="even *if* he should search").

The future indicative, similarly, has the power of conveying the idea of *command* or *volition*, the mere announcement that the act denoted *will* take place being put instead of an expression of command or volition that it *shall* take place. Thus instead of saying, "*Go* straight to bed," "*Let* that boy *go* straight to bed," one may say, "You *will go* straight to bed," "That boy *will go* straight to bed."

The subjunctive is sometimes used, in the literary style, as an alternative for the indicative in neutral conditions. Compare "If this is true, I am sorry," with "If this be true, I am sorry," and "If he tries, he will succeed," with "If he try, he will succeed." The Committee does not feel ready to express an opinion on the question whether there is a difference of feeling between the two moods, or what, if there is a difference, the feeling of the subjunctive is.

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ADDITIONAL TERMS FOR THE MORE IMPORTANT INDICATIVE AND SUBJUNCTIVE CONSTRUCTIONS

Of purpose:

"We now turn our prow for Sicily that we *may reach* in time the ship that is to take us home."

"In order that the whole people *shall enjoy* their possessions."

"Bind him, and slay, that the sin of my bidding *be* done."

Of result:

"He was so tired that he *fell* asleep."

Of comparison:

"He speaks as if he *were* not sure."

Of cause:

"You say this because you *want* to please me."

Of concession:

"Altho Boston *lies* in the latitude of Rome, it has a very different climate."

"Tho my country *be* wrong, yet will I obey her."

Direct, indirect:

Direct: "He said: '*I am convinced.*'"

Indirect: "He said *that he was convinced.*"

Direct: "He thought to himself: '*You are the most charming young lady I ever met.*'"

Indirect: "He thought to himself *that she was the most charming young lady he had ever met.*

Additional terms for use in advanced teaching:

Of advisability, necessity, and the like.—Clauses of this type are rather common. They cover a considerable range of ideas, most of which approach one of the two ideas *advisability* and *necessity*.

"It is essential that the west and the east *be* in sympathy."

"'Twere best he *speak* no harm of Brutus here."

"It is of the utmost importance that he *shall deal* with each man on his merits as a man."

Softened statement:

"I *should think*," "I *should like*," etc. (instead of the unsoftened "I think," "I want," etc.).

Generalizing, particular.—A relative clause, or a condition, may deal with individual persons or things, as in "John, who is a good boy, shall have a reward," or with *any* person or thing, within the limits designated, as in "He who is good, is happy." The generalizing relative necessarily carries with it the idea of *assumption.* Thus the sentence quoted might have been written, "*If* anyone is good, he is happy."

TERMS FOR THE MORE IMPORTANT TENSE-USES

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These terms, since they involve distinctions which most teachers of English will not desire to make, will be discussed in Part B (see below).

USES OF THE INFINITIVE IN ENGLISH

Substantive uses:

Subject: "*To neglect* exercise is dangerous."

Predicate: "The object of the meeting is *to arouse* interest in these measures."

Of exclamation: "*To think* that he should have done that!"

"Oh, *to be* in England now that April's there!" (exclamation implying wish).

Direct object: "Americans like *to travel.*"

Secondary object: "His mother taught him *to read* and *write.*"

Retained object: "He was taught *to read* and *write.*"

Appositive: "It accordingly fails of its express purpose, namely, *to cover* all sentences."

Adjectival use: "He is a boy *to be trusted.*"

Adverbial uses:

Application: "He is competent *to do* anything you please."

Respect: "This is not easy *to do.*"

Purpose: "*To make* this clear, I shall give examples."

Result: "He was so simple as *to believe* the story."

Cause or reason: "Mary was distressed *to hear* of her friend's illness."

Condition: "*To hear* him, you would think him a saint."

Predicative use:

"I believe him *to be* honest."

"We saw the fisherman *wash* his nets."

Remarks on the above.—No other part of the verb includes uses so difficult to analyze as are those of the infinitive, and in no other part is insistent analysis so little profitable to the young student. The substantive uses are in general easy to distinguish from one another (thus subject, predicate, object); the adverbial are not. It is in general advised that, in elementary teaching, the first step be to determine whether a given example is substantive, adjectival, adverbial, or predicative; and that no second step be taken, unless it be to make a more exact analysis in the case of a substantive example, and, for the sake of contrast with other ways of expression, to recognize purpose or result where present in an adverbial one.

Here, as elsewhere, the Committee has preferred not to recommend the use of the word "complementary." The number of constructions which "serve to fill out" something is very great. Predicate substantives and adjectives, objects of all kinds, all substantives with a preposition, most prepositional phrases as wholes, all phrases after a comparative, most substantive infinitives, many adverbial infinitives, and all adjectival and predicative infinitives, serve to fill out something. The French Ministerial Circular remarks that "almost all words may have complements," and bases a large proportion of its terminology upon this fact (thus "complements of the noun," "complements of the adjective," "complements of the verb, divided into direct and indirect complements"). The American Committee holds that, since the consistent use of the word would substitute it, in a very great number of constructions, for really distinctive terms, it had better not be used at all. The very fact of its large applicability points to its inherent defect—its failure to penetrate below the surface, and to set forth, at any point, the individual nature of the idea conveyed.

B. FOR GERMAN, ROMANCE, LATIN, AND GREEK

This part of the report will be added in a special reprint of the whole, which may be obtained from the University of Chicago Press, or the Secretary of the National Education Association.

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CONSTITUTION*

PREAMBLE

The National Council of Education shall have for its object the consideration and discussion of educational questions of general interest and public importance, and the presentation, thru printed reports, of the substance of the discussions and the conclusions formulated. It shall be its object to reach and disseminate correct thinking on educational questions; and, for this purpose, it shall be the aim of the Council, in conducting its discussions, to define and state with accuracy the different views and theories on the subject under consideration, and, secondly, to discover and represent fairly the grounds and reasons for each theory or view, so far as to show, as completely as possible, the genesis of opinion on the subject. It shall be the duty of the Council, in pursuance of this object, to encourage from all its members the most careful statement of differences in opinion, together with the completest statement of grounds for the same. It shall further require the careful preservation and presentation of the individual differences of opinion, whenever grounds have been furnished for the same by members of the Council. It shall invite the freest discussion and embody the new suggestions developed by such discussions. Any member making such suggestion or objection may put in writing his view, and the grounds therefor, and furnish the same to the secretary for the records of the Council. It shall prepare, thru its president, an annual report to the National Education Association, setting forth the questions considered by the Council during the previous year, and placing before the Association, in succinct form, the work accomplished. It shall embody in this report a survey of those educational topics which seem to call for any action on the part of the Association. The Council shall appoint, out of its own number, committees representing the several departments of education, and thereby facilitate the exchange of opinion among its members on such special topics as demand the attention of the profession or of the public.

ARTICLE I—MEMBERSHIP

1. The National Council of Education shall consist of one hundred and twenty members, selected from the membership of the National Education Association. Sixty of the members shall be elected by the National Council of Education, and sixty by the Board of Directors of the National Education Association.

Each body shall select ten members annually, who shall serve for six years.

2. The Council shall elect its quota of members at its regular annual meeting.

The Board of Directors of the National Education Association shall elect its quota of members at the second meeting held during the annual meeting of the National Education Association.

3. The absence of a member from two consecutive annual meetings of the Council shall be considered equivalent to resignation of membership. All persons who have belonged to the Council shall, on the expiration of their membership from any cause whatever, except expulsion, become honorary members, with the privilege of attending its regular sessions and participating in its discussions. No state shall be represented in the Council by more than twelve members.

* As amended at San Francisco session, July 12, 1911.

ARTICLE II—QUALIFICATION FOR MEMBERSHIP

All members of the Council shall be either life or active members of the National Education Association.

ARTICLE III—MEETINGS

There shall be a regular annual meeting of the Council held in connection with the Department of Superintendence of the National Education Association, or at such other time and place as the Executive Committee of the Council may designate. There may be special meetings of the Council, subject to the call of the Executive Committee, but the attendance at these meetings shall be entirely voluntary. A majority of the Council shall constitute a quorum for the transaction of business at any meeting, whether regular or called; but any less number, exceeding eight members, may constitute a quorum for the transaction of business at the regular annual meeting, as defined in this article.

ARTICLE IV—THE WORK OF THE COUNCIL

The Council shall, from time to time, undertake to initiate, conduct, and guide the thoro investigation of important educational questions originating in the Council; also to conduct like investigations originating in the National Education Association, or any of its departments, and requiring the expenditure of funds.

ARTICLE V—THE APPOINTMENT OF SPECIAL COMMITTEES AND EXPERTS

In the appointment of special committees, and in the selection of writers and speakers, it shall be the privilege of the Council to appoint such experts, whether members of the Council or not, as are deemed best qualified to conduct investigations.

ARTICLE VI—OFFICERS

The officers of the Council shall be a president, vice-president, and secretary, each of whom shall serve for three years, with terms so arranged that one officer is elected annually.

It shall be the duty of the president of the Council to prepare, with the assistance and approval of the Executive Committee, such a program for the annual meeting as shall realize as fully as practicable the purposes for which the Council was organized and exists.

ARTICLE VII—STANDING COMMITTEES

1. There shall be four standing committees: an Executive Committee, a Committee on Membership, a Committee on Educational Progress, and a Committee on Investigations and Appropriations.

2. The Executive Committee shall be composed of the president of the Council and three other members, whose terms of office shall be so arranged that one new member may be chosen each year.

3. It shall be the duty of the Executive Committee to provide an annual program by selecting, whenever feasible, subjects for investigation, and appointing committees to conduct such investigations. It shall be the duty of the Executive Committee to carry out the provisions contained in this constitution referring to volunteer and invited papers. It shall be the duty of the Executive Committee to provide a place on the program for the report of any investigation which may be ordered by the National Education Association or its departments.

4. The Committee on Membership shall be composed of the president of the Council and six other members, whose terms of office shall be so arranged that two vacancies may be filled every year.

5. There shall be appointed annually a committee of one to submit at the next meeting a report on "Educational Progress during the Past Year," in which a survey of the

important movements and events in education during the preceding year is given. This committee need not be selected from the members of the Council.

6. The Committee on Investigations and Appropriations shall be composed of nine members, whose terms of office shall be so arranged that three vacancies may be filled each year. No proposal to appoint a committee to undertake an educational investigation of any kind, and no proposal to ask the Board of Directors of the Association for an appropriation for any purpose, shall be acted upon until such proposal has been referred to this Committee on Investigations and Appropriations for report.

ARTICLE VIII—THE DUTIES OF THE COUNCIL

1. It shall be the duty of the Council to further the objects of the National Education Association, and to use its best efforts to promote the cause of education in general.

2. The meetings of the Council shall be, for the most part, of a "round table" character.

ARTICLE IX—AMENDMENTS

This constitution may be altered or amended at a regular meeting of the Council, by a two-thirds vote of the members present, and any provisions may be waived at any regular meetings by unanimous consent.

By-laws not in violation of the constitution may be adopted by a two-thirds vote of the Council.

OFFICERS, STANDING COMMITTEES, MEMBERS

OFFICERS FOR 1913–14

ROBERT J. ALEY	Orono, Me.	*President*	Term expires in 1916
JAMES Y. JOYNER	Raleigh, N.C.	*Vice-President*	Term expires in 1915
WILLIAM B. OWEN	Chicago, Ill.	*Secretary*	Term expires in 1914

EXECUTIVE COMMITTEE

THE PRESIDENT, *ex officio, chairman*

JAMES M. GREENWOOD	Kansas City, Mo.	Term expires in 1914
ELLEN C. SABIN	Milwaukee, Wis.	Term expires in 1915
DAVID B. JOHNSON	Rock Hill, S.C.	Term expires in 1916

COMMITTEE ON MEMBERSHIP

THE PRESIDENT, *ex officio*

JAMES Y. JOYNER	Raleigh, N.C.	Term expires in 1914
JAMES M. GREENWOOD, *chairman*	Kansas City, Mo.	Term expires in 1914
AUGUSTUS S. DOWNING	Albany, N.Y.	Term expires in 1915
CARROLL G. PEARSE	Milwaukee, Wis.	Term expires in 1915
A. C. NELSON	Salt Lake City, Utah	Term expires in 1916
JACOB A. SHAWAN	Columbus, Ohio	Term expires in 1916

COMMITTEE ON INVESTIGATIONS AND APPROPRIATIONS

EDWARD T. FAIRCHILD	Durham, N.H.	Term expires in 1914
ELLA FLAGG YOUNG	Chicago, Ill.	Term expires in 1914
Z. X. SNYDER	Greeley, Colo.	Term expires in 1914
JAMES M. GREENWOOD, *chairman*	Kansas City, Mo.	Term expires in 1915
FRANK A. FITZPATRICK	Boston, Mass.	Term expires in 1915
PAYSON SMITH	Augusta, Me.	Term expires in 1915
AUGUSTUS S. DOWNING	Albany, N.Y.	Term expires in 1916
T. A. MOTT	Seymour, Ind.	Term expires in 1916
G. B COOK	Little Rock, Ark.	Term expires in 1916

MEMBERS

Elected by the Association | *Elected by the Council*

TERMS EXPIRE IN 1914

*W. E. Harmon, Helena, Mont.
*David Felmley, Normal, Ill.
John R. Kirk, Kirksville, Mo.
David B. Johnson, Rock Hill, S.C.
*Wales C. Martindale, Detroit, Mich.
Ednah A. Rich, Santa Barbara, Cal.
Arthur H. Chamberlain, San Francisco, Cal.
M. Bates Stephens, Annapolis, Md.
Jacob A. Shawan, Columbus, Ohio
*James W. Crabtree, River Falls, Wis.

Wm. M. Davidson, Washington, D.C.
M. G. Brumbaugh, Philadelphia, Pa.
P. P. Claxton, Washington, D.C.
Harlan Updegraff, Philadelphia, Pa.
Oliver S. Westcott, Chicago, Ill.
Katherine D. Blake, New York, N.Y.
Mrs. James M. Greenwood, Kansas City, Mo.
*Frank Strong, Lawrence, Kans.
C. P. Cary, Madison, Wis.
*Homer H. Seerley, Cedar Falls, Iowa

TERMS EXPIRE IN 1915

John MacDonald, Topeka, Kans.
H. B. Wilson, Topeka, Kans.
*C. O. Merica, Redwing, Minn.
S. L. Heeter, Pittsburgh, Pa.
Laura D. Gill, Boston, Mass.
*David Starr Jordan, Stanford University, Cal.
Walter R. Siders, Pocatello, Idaho
*Edward L. Thorndike, New York, N.Y.
Edwin G. Cooley, La Grange, Ill.
*Frederick E. Bolton, Seattle, Wash.

Nebraska Cropsey, Indianapolis, Ind.
Lewis H. Jones, Ypsilanti, Mich.
Lloyd E. Wolfe, Memphis, Tenn.
*William H. Black, Marshall, Mo.
Henry Suzzallo, New York, N.Y.
Luther L. Wright, Lansing, Mich.
George M. Philips, West Chester, Pa.
*Edmund A. Jones, Westerville, Ohio
Ernest E. Balcomb, Greensboro, N.C.
J. E. Burke, Boston, Mass.

TERMS EXPIRE IN 1916

John W. Cook, De Kalb, Ill.
W. A. Brandenburg, Pittsburg, Kans.
Lorenzo D. Harvey, Menomonie, Wis.
Thomas H. Harris, Baton Rouge, La.
Carroll G. Pearse, Milwaukee, Wis.
Calvin N. Kendall, Trenton, N.J.
*Ella C. Sullivan, Chicago, Ill.
Randall Spaulding, Montclair, N.J.
George D. Strayer, New York, N.Y.
*Estelle Carpenter, San Francisco, Cal.

D. H. Christensen, Salt Lake City, Utah
*Payson Smith, Augusta, Me.
James H. Van Sickle, Springfield, Mass.
James A. Barr, Berkeley, Cal.
James Y. Joyner, Raleigh, N.C.
Robert J. Aley, Orono, Me.
Charles E. Chadsey, Detroit, Mich.
David Snedden, Boston, Mass.
J. Stanley Brown, Joliet, Ill.
Albert E. Winship, Boston, Mass.

TERMS EXPIRE IN 1917

Frank A. Fitzpatrick, Boston, Mass.
William B. Owen, Chicago, Ill.
M. E. Pearson, Kansas City, Kans.
James M. Greenwood, Kansas City, Mo.
A. J. Matthews, Tempe, Ariz.
W. T. Carrington, Springfield, Mo.
William P. Burris, Cincinnati, Ohio
J. G. Crabbe, Richmond, Ky.
*Margaret E. Schallenberger, San José, Cal.
*William E. Wilson, Ellensberg, Wash.

W. J. Kerr, Corvallis, Ore.
Joseph Swain, Swarthmore, Pa.
N. C. Schaeffer, Harrisburg, Pa.
Ben Blewett, St. Louis, Mo.
Z. X. Snyder, Greeley, Colo.
E. E. Bass, Greenville, Miss.
E. C. Moore, New Haven, Conn.
*G. W. A. Luckey, Lincoln, Nebr.
John A. Wood, New York, N.Y.
D. B. Parkinson, Carbondale, Ill.

TERMS EXPIRE IN 1918

Thomas A. Mott, Seymour, Ind.
John H. Phillips, Birmingham, Ala.
Francis G. Blair, Springfield, Ill.
James H. Baker, Boulder, Colo.
Ellen C. Sabin, Milwaukee, Wis.
Charles S. Meek, Boise, Idaho
Edward T. Fairchild, Durham, N.H.
E. E. Scribner, Ishpeming, Mich.
*Albert A. Murphree, Gainesville, Fla.
Helen C. Putnam, Providence, R.I.

Ella Flagg Young, Chicago, Ill.
*Edwin S. Monroe, Muskogee, Okla.
W. H. Elson, Cleveland, Ohio
John W. Carr, Bayonne, N.J.
Edward C. Elliott, Madison, Wis.
*Grace C. Strachan, Brooklyn, N.Y.
Adelaide S. Baylor, Indianapolis, Ind.
Carleton B. Gibson, Rochester, N.Y.
C. G. Schulz, St. Paul, Minn.
Oscar T. Corson, Columbus, Ohio

*Not present at either meeting of the Council in 1913.

Elected by the Association — *Elected by the Council*

TERMS EXPIRE IN 1919

James M. Green, Trenton, N.J.
Augustus S. Downing, Albany, N.Y.
George B. Cook, Little Rock, Ark.
*Stratton D. Brooks, Norman, Okla.
*Henry B. Brown, Valparaiso, Ind.
B. K. Purdum, Hamilton, Md.
A. C. Nelson, Salt Lake City, Utah
Reed B. Teitrick, Harrisburg, Pa.
A. J. Kinnaman, Bowling Green, Ky.
*J. L. Snyder, Agricultural College P.O., Mich.

Fannie Fern Andrews, Boston, Mass.
Bettie A. Dutton, Cleveland, Ohio
Charles H. Keyes, Saratoga Springs, N.Y.
*J. F. Sims, Stevens Point, Wis.
Charles H. Judd, Chicago, Ill.
Bird T. Baldwin, Swarthmore, Pa.
A. Duncan Yocum, Philadelphia, Pa.
Josephine C. Preston, Olympia, Wash.
Thomas C. Miller, Shepherdstown, W.Va.
Frank B. Dyer, Boston, Mass.

HONORARY MEMBERS

John W. Abercrombie, University, Ala.
Edwin A. Alderman, Charlottesville, Va.
Sarah Louise Arnold, Boston, Mass.
James B. Aswell, Natchitoches, La.
Brown Ayres, Knoxville, Tenn.
Thomas M. Balliet, New York, N.Y.
Clifford W. Barnes, Lake Forest, Ill.
Earl Barnes, Philadelphia, Pa.
W. H. Bartholomew, Louisville, Ky.
Alexander Graham Bell, Washington, D.C.
Ida C. Bender, Buffalo, N.Y.
Thomas W. Bicknell, Providence, R.I.
Alma L. Binzel, Missoula, Mont.
Richard G. Boone, Berkeley, Cal.
David R. Boyd, Albuquerque, N.M.
Albert G. Boyden, Bridgewater, Mass.
Elmer E. Brown, New York, N.Y.
William L. Bryan, Bloomington, Ind.
Nicholas Murray Butler, New York, N.Y.
David N. Camp, New Britain, Conn.
Frank B. Cooper, Seattle, Wash.
Oscar H. Cooper, Abilene, Tex.
E. W. Coy, Cincinnati, Ohio
Edwin B. Craighead, Missoula, Mont.
Charles DeGarmo, Ithaca, N.Y.
Robert E. Denfeld, Duluth, Minn.
John Dewey, New York, N.Y.
Katharine E. Dopp, Chicago, Ill.
John J. Doyne, Conway, Ark.
Charles W. Eliot, Cambridge, Mass.
James A. Foshay, Los Angeles, Cal.
Julius I. Foust, Greensboro, N.C.
William K. Fowler, Lincoln, Nebr.
H. B. Frissell, Hampton, Va.
R. B. Fulton, Miller School P.O., Va.
Aaron Gove, Denver, Colo.
Mrs. Edwin C. Grice, Philadelphia, Pa.
W. N. Hailmann, Cleveland, Ohio
Clem Hampton, Hampton Springs, Fla.
Paul H. Hanus, Cambridge, Mass.
William E. Hatch, New Bedford, Mass.
Cheeseman A. Herrick, Philadelphia, Pa.
Walter L. Hervey, New York, N.Y.
Albert Ross Hill, Columbia, Mo.
W. M. Holloway, Tallahassee, Fla.
James H. Hoose, Los Angeles, Cal.
James L. Hughes, Toronto, Can.

Thomas Hunter, New York, N.Y.
Edmund J. James, Champaign, Ill.
R. L. Jones, Nashville, Tenn.
Charles M. Jordan, Minneapolis, Minn.
William F. King, Mt. Vernon, Iowa
Henry M. Leipziger, New York, N.Y.
Livingston C. Lord, Charleston, Ill.
James MacAlister, Philadelphia, Pa.
James A. MacLean, Moscow, Idaho
Charles McKenny, Ypsilanti, Mich.
Charles A. McMurray, De Kalb, Ill.
I. C. McNeill, Los Angeles, Cal.
Edgar H. Mark, Bowling Green, Ky.
George H. Martin, West Lynn, Mass.
William H. Maxwell, New York, N.Y.
Estelle Reel Meyer, Toppenish, Wash.
Jesse F. Millspaugh, Los Angeles, Cal.
Henry C. Morrison, Concord, N.H.
William A. Mowry, Hyde Park, Mass.
Mary E. Nicholson, Indianapolis, Ind.
John W. Olsen, St. Paul, Minn.
Warren D. Parker, Pasadena, Cal.
Frank E. Parlin, Cambridge, Mass.
Josiah L. Pickard, Cupertino, Cal.
James R. Preston, Jackson, Miss.
George J. Ramsey, Raleigh, N.C.
William O. Riddle, Des Moines, Iowa.
Mrs. Ellor C. Ripley, Boston, Mass.
James E. Russell, New York, N.Y.
Henry Sabin, Des Moines, Iowa
J. G. Schurman, Ithaca, N.Y.
Irwin Shepard, Winona, Minn.
Charles R. Skinner, New York, N.Y.
Euler B. Smith, LaGrange, Ga.
James A. Smith, Deland, Fla.
Henry Snyder, Jersey City, N.J.
Edwin E. Sparks, State College, Pa.
William S. Sutton, Austin, Tex.
John Swett, Martinez, Cal.
A. R. Taylor, Decatur, Ill.
John G. Thompson, Fitchburg, Mass.
L. S. Thompson, Jersey City, N.J.
William O. Thompson, Columbus, Ohio
Charles F. Thwing, Cleveland, Ohio
B. W. Torreyson, Little Rock, Ark.
Julia S. Tutwiler, Livingstone, Ala.
Charles C. Van Liew, San Francisco, Cal.

* Not present at either meeting of the Council in 1913.

JASPER N. WILKINSON, Muskogee, Okla.
DELIA L. WILLIAMS, Delaware, Ohio
JOHN W. WITHERS, St. Louis, Mo.
LIGHTNER WITMER, Philadelphia, Pa.
HARRY K. WOLFE, Lincoln, Nebr.
L. E. WOLFE, Memphis, Tenn.
CALVIN M. WOODWARD, St. Louis, Mo.

SECRETARY'S MINUTES

PHILADELPHIA MEETING

OFFICERS

President—CHARLES H. KEYES, president of Skidmore School of Arts..Saratoga Springs, N.Y.
Vice-President—JAMES Y. JOYNER, state superintendent of public instruction....Raleigh, N.C.
Secretary—ROBERT J. ALEY, president of the University of Maine .....Orono, Me.

FIRST SESSION—MONDAY EVENING, FEBRUARY 24, 1913

Charles H. Keyes, president of Skidmore School of Arts, Saratoga Springs, N.Y., called the meeting to order at 8:20 P.M. in the William Penn High School, Philadelphia, Pa.

The topic for consideration at this session was "The Reorganization of the Teaching Profession," the general presentation of which was made by Henry Suzzallo, Teachers College, Columbia University, New York, N.Y.

Those taking part in the discussion were: A. Duncan Yocum, professor of pedagogy, University of Pennsylvania, Philadelphia, Pa.; William M. Davidson, superintendent of schools, Washington, D.C.; George R. Crissman, principal of Training School, Warrensburg, Mo.; Benjamin F. Moore, superintendent of city schools, Muncie, Ind.; and John MacDonald, editor, *Western School Journal*, Topeka, Kans.

Superintendent William M. Davidson, of Washington, D.C., moved:

That a committee of seven members of the National Council of Education be appointed by the president of the Council to whom shall be referred the address of Professor Henry Suzzallo on "The Reorganization of the Teaching Profession," and that the said committee shall report back to the Council at some future meeting its conclusions and suggestions on the desirability of attempting to perfect some such plan as that outlined in the address.

The Council voted to lay this motion on the table until the meeting of the Council on Tuesday morning, February 25.

SECOND SESSION—TUESDAY FORENOON, FEBRUARY 25, 1913

The session was called to order in the Clover Room of the Bellevue-Stratford Hotel at 9:35 A.M., with President Keyes in the chair.

John W. Cook, president, Northern Illinois State Normal School, DeKalb, Ill., presented the following resolution:

Resolved, That the Council recommends to the National Education Association the appointment of a committee to devise ways and means by which the subject of sex education shall be fitted into the curriculum of the normal schools, in order to equip teachers for a wise later treatment of the problem in the grades.

This resolution was duly passed by the Council.

The resolution of the previous session relating to Professor Suzzallo's address was then taken from the table and adopted.

Thomas D. Wood, M.D., of Columbia University, New York, N.Y., chairman of the Committee on Health Problems in Education, presented a report on "The Sanitation of Rural Schools."

Those speaking in the general discussion were: J. A. Shawan, superintendent of city schools, Columbus, Ohio; E. B. Hoag, M.D., state medical inspector of schools, Minneapolis, Minn.; John R. Kirk, president, State Normal School, Kirksville, Mo.; Thomas

C. Miller, principal of Shepherd College, State Normal School, Shepherdstown, W.Va.; W. A. Brandenburg, superintendent of city schools, Oklahoma City, Okla.; C. P. Cary, state superintendent of public instruction, Madison, Wis.; O. T. Corson, editor, *Ohio Educational Monthly*, Columbus, Ohio; J. M. Dodson, University of Chicago, Chicago, Ill.; and J. W. Cook, president, Northern Illinois State Normal School, DeKalb, Ill.

THIRD SESSION—TUESDAY AFTERNOON, FEBRUARY 25, 1913

President Keyes called the meeting to order in the Ballroom of the Bellevue-Stratford Hotel at 2:00 P.M.

A communication was received from the Vocational Guidance Committee of New York and was referred to a committee consisting of L. D. Harvey, president, Stout Institute, Menomonie,Wis.; T. A. Mott, superintendent of schools, Richmond, Ind.; and Franklin B. Dyer, superintendent of schools, Boston, Mass.

George D. Strayer, Teachers College, Columbia University, New York, N.Y., presented a report from the Committee on Tests and Standards of Efficiency in Schools and School Systems. Those participating in the discussion were: E. C. Elliott, University of Wisconsin, Madison, Wis.; J. H. Van Sickle, superintendent of schools, Springfield, Mass.; C. N. Kendall, state commissioner of education, Trenton, N.J.; Ben Blewett, superintendent of instruction, St. Louis, Mo.; J. M. Green, principal, State Normal School, Trenton, N.J.; J. M. Rice, Mt. Vernon, N.Y.; J. D. Burks, Philadelphia, Pa.; Charles S. Meek, superintendent of schools, Boise, Idaho; Henry Suzzallo, Teachers College, Columbia University, New York, N.Y.; William D. Parkinson, superintendent of schools, Waltham, Mass.; L. P. Ayres, Russell Sage Foundation, New York, N.Y.; Augustus S. Downing, first assistant commissioner of education, Albany, N.Y.; Charles H. Judd, University of Chicago, Chicago, Ill.; Edward F. Buchner, Johns Hopkins University, Baltimore, Md.

Superintendent W. A. Brandenburg, Oklahoma City, Okla., moved that the report of the committee be approved and that a committee be appointed in accordance with the recommendations. A. S. Downing, Albany, N.Y., moved as a substitute that we continue the present committee and accept its report of today as a report of progress. The substitute was voted down. The original motion was then carried. Upon motion, the chair was authorized to appoint the committee and to make it consist of fifteen members.

The chair announced the following committee on Professor Suzzallo's address:

Charles H. Judd, University of Chicago, Chicago, Ill.
David Snedden, commissioner of education for Massachusetts, Boston, Mass.
F. E. Bolton, University of Washington, Seattle, Wash.
C. S. Meek, superintendent of schools, Boise, Idaho.
Katherine D. Blake, principal of public school, New York, N.Y.
Augustus S. Downing, first assistant commissioner of education, Albany, N.Y.
John R. Kirk, president, State Normal School, Kirksville, Mo.

FOURTH SESSION—TUESDAY EVENING, FEBRUARY 25, 1913

President Keyes called the meeting to order in the William Penn High School at 8:25 P.M.

The committee authorized by the action taken at the afternoon session was announced by the chair as follows:

George D. Strayer, Columbia University, New York, N.Y.
E. C. Elliott, University of Wisconsin, Madison, Wis.
William H. Maxwell, superintendent of schools, New York, N.Y.
E. L. Thorndike, Columbia University, New York, N.Y.
J. H. Van Sickle, superintendent of schools, Springfield, Mass.
E. P. Cubberley, Leland Stanford Jr. University, Stanford University, Cal.
Charles H. Judd, University of Chicago, Chicago, Ill.
Ella Flagg Young, superintendent of schools, Chicago, Ill.

Paul H. Hanus, Harvard University, Cambridge, Mass.
C. N. Kendall, state commissioner of education, Trenton, N.J.
Katherine D. Blake, principal of public school, New York, N.Y.
F. E. Spaulding, superintendent of Newton schools, Newtonville, Mass.
Ben Blewett, superintendent of instruction, St. Louis, Mo.
Adelaide S. Baylor, Department of Public Instruction, Indianapolis, Ind.
John H. Phillips, superintendent of schools, Birmingham, Ala.

The Committee on Rural Schools made an oral report of progress. Various phases of the subject were presented informally by the following members of the committee: Edward T. Fairchild, president, New Hampshire College of Agriculture and Mechanic Arts, Durham, N.H.; Edward Hyatt, state superintendent of public instruction, Sacramento, Cal.; Luther L. Wright, state superintendent of public instruction, Lansing, Mich.; Thomas H. Harris, state superintendent of education, Baton Rouge, La.; A. C. Nelson, state superintendent of public instruction, Salt Lake City, Utah; John R. Kirk, president, State Normal School, Kirksville, Mo.; and Adelaide S. Baylor, Department of Public Instruction, Indianapolis, Ind.

Upon motion of Secretary Robert J. Aley, the president of the Council was directed to send a telegram of greeting to H. B. Brown, president, Valparaiso University, Valparaiso, Cal., who has been seriously ill at the Touraine Hotel, Boston, since October 3, 1912.

Council adjourned at 10:25 P.M.

FIFTH SESSION—FRIDAY FORENOON, FEBRUARY 28, 1913

The Council met in joint session with the Department of Superintendence in the Ballroom of the Bellevue-Stratford Hotel.

The meeting was called to order by President Keyes at 9:30 A.M.

The record of this session is found in the minutes of the Department of Superintendence.

ROBERT J. ALEY, *Secretary*

PAPERS AND DISCUSSIONS

TOPIC: THE REORGANIZATION OF THE TEACHING PROFESSION

HENRY SUZZALLO, PROFESSOR OF THE PHILOSOPHY OF EDUCATION (EDUCATIONAL SOCIOLOGY), TEACHERS COLLEGE, COLUMBIA UNIVERSITY, NEW YORK, N.Y.

Of late there has been some discontent with the ideals, methods, and relations of those who are engaged in the profession of public-school work. The dissatisfaction has registered itself in numerous ways. The public has become critical of schools and schoolmasters. The protest of the parent has been given an enlarged voice by the magazine writer. Citizens have overturned the educational administration of their own cities, often lending the force of their honest but blind revolt to the machinations of politicians. Civic agencies, too, have conducted inquiries from their own special points of view. The teachers themselves, becoming dissatisfied, call for an

economic return that will compensate them for the spiritual satisfactions lost in the growth of the educational machine. They plead for more democracy, and organize the grade teachers against their official leaders. The superintendents, too, pressed by the huge educational responsibilities that have been thrust upon the modern school, make change after change, often without adequate knowledge, in the hope of meeting criticism and alleviating difficulties of which they are more or less clearly aware. The more progressive of them call in the efficiency expert to give them aid in the diagnosis of existing faults and the construction of new ways and means. All these facts are symptomatic of one underlying truth, that the teaching organization of our public schools is far from satisfactory either to its members or to its patrons, and that we are attempting by hit-and-miss methods to reconstruct the profession of public education.

THE PROBLEM

The fault with all these efforts is found in the isolated and fragmentary nature of the attempts at reform. Often unintelligent, and more often unwholesome, in their diagnosis of defect, they have simply hastened our discontent and hurried us to the pressing necessity of an organized program of reconstruction. As a professional group, we are at once confronted with the fact that many of the elements in our situation are beyond immediate professional control. The public will not always provide adequate finances, immunity from politics, or appreciative support in terms of progressive public opinion. But, at any rate, we are bound so to organize ourselves that we can better meet the expert obligations which belong exclusively to us, and pave the way for those dealings with the public that are important alike to society and to the profession. I believe, therefore, that there is no more important question before us than that of the reorganization of the teaching profession. It is primary in all substantial and wholesome progress. How then can we make teaching a profession? Or, if our traditional assumption of the status be justified, how shall we make it a better profession? Before we can answer these questions we must first ask ourselves: What is a profession? What standards hold in all professional life? And, under existing conditions, how far do teachers fall short of these ideals of efficient service?

PROFESSIONAL AND NONPROFESSIONAL WORK

We are in the habit of calling some types of work professional, implying that others are not. Traditionally we have always spoken of law, theology, medicine, and teaching as professions. In the opinion of many, such occupations as engineering, journalism, nursing, and philanthropy are regarded as recent recruits. Ordinarily we do not regard unskilled labor, the mechanical trades, and business among the professional services.

THE NATURE OF THE DISTINCTION

All these classifications imply, however worthy and respectable every useful work may be, that there are some which carry wider responsibility, and call for larger knowledge and skill, greater power of initiative, and increased capacity for co-operation. These, as history proves, are more readily classified as professions. But there seems to be no justification for the assumption that one particular work, such as law, is inevitably to be included among the professions, and that another, such as business, is just as inevitably to be excluded. Law may cease to be professional in its practice, and business may attain professional ideals; which is to say that the manner in which a service is rendered is quite as important as the situations with which it deals.

Every traditional profession, therefore, must conform to certain standards of workmanship if it is to maintain its place; and every form of service which aspires to professional status must reconstruct its practice so that these special standards gain a larger recognition than is now current. The public esteem given to the existing professions is not a perpetual grant; it is conferred only for an indeterminate period of good behavior.

COMPARATIVE STUDY OF PROFESSIONAL STANDARDS

What, then, are the important standards which determine professional practice? A careful survey of the accepted policies and ethical codes of existing professions reveals many detailed variations, but they all agree in implying that there are certain positive characteristics which all types of professional life possess. These qualities are corroborated in a negative way by recognized types of unprofessional conduct, and by the current arguments offered for considering business and the trades nonprofessional in their present status.

FOUR QUALITIES OF PROFESSIONAL SERVICE

The fundamental qualities which seem to characterize work done in a professional spirit are: (1) Professional work must always be performed as a social service. (2) It requires an expert knowledge and technic. (3) It must be practiced with a resource and initiative adequate to meet changing needs. (4) It is a co-operation that takes account of the interests of all human factors involved. Tersely stated, professional work is: (1) a social servantship, (2) an expert service, (3) a mastery of crises, (4) an ethical co-operation.

PUBLIC EDUCATION A SOCIAL SERVANTSHIP

It is because the professions, traditional and modern, usually exercise a great influence upon fundamental social rights and standards of high value that they have their enlarged importance. The incidental effects of professional practice on social welfare are usually more important than the

fact that the individual practitioner does or does not enjoy a prosperous livelihood. Hence every member of a profession is asked to pursue his work as one primarily for public service and secondarily for earning his living. If his work is dominated by a sense of personal financial gain and loss, he is likely to make it a business rather than a profession. When we say "business is business," we usually mean that we have failed to meet some moral obligation that society would prefer to have us keep. This may be fairly tolerable in business; it is intolerable in a profession, because the social and human considerations that are involved are too precious to be set aside. The lawyer unavoidably deals with the constitutional rights of life, liberty, property, and the pursuit of happiness; the doctor, with the natural gifts of health, efficiency, and physical life; the minister, with that religious faith or optimism which guarantees an effective confidence in an orderly and moral universe; the teacher, with all the potentialities of childhood, the gifts of natural and institutional life. From one point of view, there is not a single unprofessional practice that is not a result of ignoring or violating some such fundamental personal or social consideration. A doctor having the necessary skill ought not to let men die of neglect because they cannot pay. Neither should a lawyer let the innocent go to jail merely because they are too poor to pay a fee. The professional sins of teachers and ministers are of another sort. They are a conscienceful people. They fall short because they do not see their full social duty, rather than because, seeing it, they will not render service.

For these reasons the teaching and other professions should be dominated by a consciousness of social conditions and ends. Their work should be regarded as primarily an expression of unselfish social service.

In a rough way, society tries to protect itself against an abuse of these large powers which are incident to the earnings of a livelihood in professional service. It demands more general culture preliminary to the study and practice of a profession. This means that it requires that the professional practitioner, because of his peculiar powers and temptations, must be given a fundamental knowledge of those values, ideals, and traditions which are fundamental to our social life. Hence the boy may go to a trade, or a business, at the close of the elementary school, but he may not start his work as a teacher, lawyer, doctor, or nurse before he has passed thru the high school at least. The secondary school means a broader and more intensive view of life in general than the elementary school. Professional work is not merely more scientific and complex than nonprofessional service—it has intimate connections with the fundamental values of life. It ramifies to such an extent that it touches all the important aspects of our civilization. Hence the need for a wider, more intensive general education, which will foster a knowledge of, and a reverence for, human rights and institutions.

But a wide basis in general education is not an adequate guaranty

that such influential work will be done in that professional spirit which guarantees the conservation of fundamental rights and essential values. Professional training must itself be socialized, so that the bearing of particular practices on general welfare will always be obvious to the practitioner.

In this connection it is often said that the teaching profession lacks an adequate social consciousness. It is too frequently academic rather than vital in its approach to important matters bearing on the training of children for life. It is more often bookish than social in its interpretations of the place of knowledge. Hence the social world moves on, and the profession remains devoted to old knowledge and old needs preserved by the isolation of the school. When at last the school reacts against our overconservative traditionalism, the schoolmaster's devotions are likely to be caught by a new social demand more forceful than real. We do not know the social world either by direct experience or thru social science, and we are either halting or defective in our responses to a changing civilization.

But the overconservative or overfaddistic tendencies just mentioned are not more pathetic failures than the new enthusiasm of many teachers for organization on an economic basis. Pensions, tenure, and pay are vital questions, but they cannot and should not be made the prime basis of teachers' associations. To do so is to focus our professional vigor on personal return rather than on impersonal service. The prime end of teachers' organizations should be to make more efficient our social servantship. To the extent that the economic status of teachers affects their efficiency, and because teachers are human beings with certain economic and personal rights of their own, all these financial difficulties are a legitimate concern. But service, not selfishness, must be the dominant ideal.

PUBLIC EDUCATION AN EXPERT SERVICE

As teachers we are set aside to perform a more or less specialized duty. We should not have schools if homes could do the work as well. Teachers must have more power about their business than ordinary laymen. Otherwise we are not expert in our workmanship. The authority with which we speak should be based, not upon mere years of service, but on superior intelligence and skill in doing our work. In a world full of intelligent people, we shall have to stir ourselves to keep ahead in a work which has so much to do with life in general, a field in which all men play some part. To be expert necessitates definite technical powers along several lines.

The teacher's chief business is to intermediate between childhood and society. He must get children over into social life successfully else they will be failures. He must carry civilization over from books and constitutions into human beings or it will become a dead letter. Successful life is made up of *knowing* the facts of life and *reacting* appropriately to them.

The teacher must first be a wholesome and successful social human being who knows life in terms of (*a*) superior command over its essential facts and conditions (scholarship), and (*b*) superior attitudes toward them (socialized character). But this only provides the superior man out of whom the teacher is to be made. The second requirement is that he should have expert power to transmit truth and attitude. This requires (*a*) superior conscious methods for teaching truth (pedagogy), and (*b*) superior unconscious methods for transmitting values, attitudes, standards, or ideals (personality). The ideal of expert service lays down these standards; therefore: (1) Every teacher should have an adequate cultural resource for his work. The elementary teacher should have a high-school education; the secondary teacher a college training, etc. (2) Every teacher must have a professional course in general and special methods of teaching coupled with some scientific knowledge of the educational psychology and educational sociology basic to their interpretation and application. (3) Every teacher must acquire an interest in, and command over, the fundamental problems and purposes of modern social life thru personal contact with, and extensive study of, social affairs. (4) Every teacher must react upon the situations of school life and classroom instruction with sincere and wholesome reactions that will be true to the larger aspirations of the outside world.

The supervising and administrative officials need all these expert powers of the teacher of children, if not in terms of a practical and active power, at least in terms which guarantee ready appreciation and constructive criticism. And they require more. In our modern school systems there are gathered about the teaching function many other functions, such as school organization, school administration, and school management. In all of these, the modern superintendent is obliged to have power superior to that of his teaching staff, his board of education, or the laymen of his community.

When we look at the profession as we know it and apply these standards, our defects seem large. We are appalled by the large number of certificated teachers who have had little more general education than that of the grade of school in which they teach, and no special professional training for their particular task. We feel less confidence in our practical leaders when we realize that they are for the most part graduate-teachers who have had no additional special training for their new obligations save the apprenticeship served in the practical school of trial and error. This was well enough when our men could grow up with the school system, but the time has passed when we can rely upon the gifted few who emerge; we must make provision for the systematic training of the many who will fill the posts of lesser and greater responsibilities. We cannot raise our standards for training teachers without raising those for training the supervisory staff. The work of public education must be made expert from top to bottom, if we would have the public respect and support. In no other way can we check that rebellion now beginning which arrays grade teachers against their official leaders.

PUBLIC EDUCATION A MASTERY OF CRISES

We might be richly endowed with the spirit of social service, expert in teaching children and administering the schools, and still lack the power needed to make us effective. Our adjustment is not a fixed one. The problems with which efficiency must deal constantly change. The conditions underlying teaching and administration vary because we have new selections of children and new problems of civilization to deal with. These variables create a constant succession of new difficulties that challenge our resourcefulness. They are the educational crises, personal and social, in which something important is at stake.

A man who spends his life in the ever-repeating and monotonous business of working the lever of a machine in a shoe factory has little opportunity to meet new problems. It is not normal for him to be facing and solving new situations, mental crises that require resource and thought. The very nature of his situation makes it impossible for him to become what every professional workman is—a master of crises.

No such limiting situation exists in teaching. The teacher is master of the school, unless he makes of it a machine which masters him. Every child is in a degree different from every other, and so with every class, and with every day with the same class. Always there is some new ignorance, doubt, hope, or discouragement to be coped with. Here the resource and tact of the teacher are called for fully. He must know and think. It is precious human stuff in trouble with which he deals.

As a lawyer is called in to redeem a client from a situation which jeopardizes his legal rights, as a doctor protects health, as a minister faces down the danger of shattered faith, so the teacher conserves the power of childhood, conquers the deadening touch of error and discouragement, fosters intellectual courage and the passion for goodness. The teacher is in short a minister to the intellectual, moral, and spiritual crises of childhood.

At least it should be so, if teaching is rightly practiced. If our teaching becomes such a monotonous drill and grind that the child feels it to be of little moment to him, then teaching is not a professional service. Schools cannot become "locksteps" and "machines" and at the same time render professional service.

The crucial nature of all teaching of the young is frequently missed because we are dealing with children and not with adults. Teaching is a "calling," tho the pupil does not personally "call" us into his life. We foresee his needs and serve them. Because childhood's troubles are solved situations to the adult it does not follow that they are not important to the child. Children's troubles are very real to them. To deny a child's curiosity as it pokes around the world may be to commit him to slow intellectual starvation. Harshly to hush up his play and his garrulousness is to cripple his ultimate power to act, express, and control himself. And then it is also true that childhood's troubles come close together, as they

do not in an adult's world. A child is only a babe ushered into a great confusing universe. Nothing is old to him; everything is new. The very commonness of new problems in his life hides their crucial nature from us, who look for new problems to appear only now and then. Only as we approach childhood with the traits of full sympathy and versatile imagination can we serve little children, and make them men and women of the power "they were born to be."

The essence of efficient teaching is to be found in the modern gospel of reverencing the student's personality. In ever-variable teaching methods, rather than in a uniform and fixed use of device, is true mastery over childhood to be found. No great teacher, no moderately efficient one, will forever crave a rigidly fixed school system, an unchanged course of study, the same subject, or the same grade. He will be happy for the adventure of meeting new problems, glad to hear a call to his resources, for these redeem teaching from deadening sameness and make of it a real and free art at once effective and congenial.

The spirit of mastery over varying needs, which should characterize classroom teaching, should also characterize every public-school function which has been differentiated from teaching. It should be present in the organization, administration, and supervision of schools, tho, sad to relate, it seldom is. It is the business of the school administrator to aid rather than hinder the growth of this spirit in the teacher, as it is his emphatic business to remold the structure of the school system to meet the changing social conditions and aspirations of his community. Every school superintendent should aim to master the difficulties of the civilization in which he lives to the degree that the right education of men and women will contribute.

Yet it can scarcely be said that we have gracefully welcomed the doctrine that teaching as a professional work is a constant progressive adjustment to changing needs. Teachers teach the same old subjects in the same old way when they ought to be teaching many kinds of children in different ways. They still shudder when the superintendent hints at change in the course of study or methods of teaching. Superintendents still impose a deadening uniformity on teachers and children which kills the individualities and enthusiasms of both and ignores differing social conditions and psychological needs. And how slow we all are to perceive what our own social time and place require. The industrial leaders of our country have beaten three times on the doors of our elementary schools asking for the early development of those fundamental interests and skills that the vocation will later call for and specialize; once in terms of drawing, again in terms of manual training, now in terms of industrial arts. We have only begun to hear. Shall our minds not be quickened to the changing needs of our own times so that school organization and school teaching may be remolded again and again to the new efficiencies required? We cannot remain stubbornly

conservative, become wildly radical, or affect a feeble responsiveness, and still do our full professional duty. We must be open of mind to changing circumstances, flexible in technic, scientific in point of view, and eager and masterful in our ministry to new educational problems, if we are to play our professional part in the world's great task.

TEACHING AN ETHICAL CO-OPERATION

The time has passed when we can trust that the spirit of service, expert workmanship, resourcefulness, and initiative will be adequately generated and distributed in the teaching profession by any such loose organization as we have had in the past. The leadership of the rare few and the spontaneous co-operation of unusually progressive minorities will still be needed; but we must make more efficient use of them. During the past fifty years every large private interest has learned the worth of corporate organization. The public interest in clean politics, the fair conduct of business, or efficient public schools is entitled to the massive power of a similar support. We can capitalize the isolated demands of those interested in spiritual and social welfare just as readily as we can gather the scattered savings of many men, prosperous in a small way. In public education the time has come when we must organize the forces that favor an efficient public education. First, we must organize the 500,000 American teachers who have a professional obligation to serve the public in maintaining good schools. Second, we must associate with them every layman who has enough surplus interest and energy to be specially devoted to the schools. I stress this association of citizens with professional teachers, for, unlike law and medicine, public-school teaching is a state matter. We need the counsel and the influence of laymen who have an interest in our democracy and our schools. We cannot make progress without consciousness of general needs, or without the support of public opinion.

At present teachers and laymen do not adequately understand and support each other. Worse, the teachers themselves do not understand each other. It can scarcely be said that the paltry ten or twelve thousand now included in the existing national association are an adequate representation of the whole group of public-school teachers. The various state associations are themselves not sufficiently inclusive. They enroll from one to eight thousand members who are more or less transient in their interest and membership, the geographical location of meetings and the administrative zeal of the officers being the chief factors in enrollment. These state associations have no direct connection with the national association; and no existing method of co-operation among the state associations is effective.

Both state and national associations are organizations with a merely occasional purpose. The chief function of the permanent officers is to arrange for the annual meetings, at which the main business of members is

to listen to addresses. Such organizations usually have no power over practical educational affairs in the interim, and even the resolutions of such meetings have few consequences.

The result of this situation is plain. Bodies of laymen usually have more direct influence upon educational legislation than groups of professional teachers. We find it difficult to unify our own opinions in the face of small disagreements within the profession, for sheer lack of that machinery of association and communication which insures adequate information, intelligent discussion, and approximate unity of opinion. We are powerless to enforce our standards of right and wrong upon the public. Of this we have many evidences. The influence of partisan and personal politics still interferes with a full rendering to the public of an expert educational service. Teachers and books are still selected, in many places, by boards of education rather than superintendents. Many teachers still split their fees for the first month's work with teachers' agencies, the chief purpose of which is commercial, not professional. Some textbook and supply houses still exploit the public schools for their own ends.

The teacher or superintendent who stands against these influences encounters a pernicious hostility. Without the backing of an organized profession for his professional ideals of public service he is, in backward and indifferent communities, as likely as not to lose his position. Thereafter, that one failure to hold his position is, in matters of reappointment or promotion with boards of education, a presumption of incompetency rather than of superior training and standards. Thus the present status of professional organization permits a handicap to be placed upon superior courage and idealism in maintaining high standards of service.

When I suggest that we need the massive strength which would come thru the corporate will of 500,000 American teachers, I do not mean to imply the organization of a merely coercive power. A national labor union of teachers is farthest from my thoughts. But I do mean to suggest all the powers of an ethical co-operation which keeps well in mind its obligation to every human and social interest in and out of the profession. The ethical co-operation which the true professional practice of education requires is not restricted to the teacher-student contact. It extends to every human relationship which the teacher has: to the community, to the board of education, to supervisory officers, to textbook and other commercial houses, and to fellow-teachers as well.

In the new ethical co-operation which must come, we shall have to face the marring effects of many unethical traditions. Is it not true that teachers make reputations for themselves on the high marks of children they have crammed, say in literature, and turned them out on the world so deadened to any literary appeal that they will never read a classic again? The child here has been used for the teacher's purposes and not respected for his own.

Is it not true that the superintendents have made teachers in great school systems mechanical, unresponsive, and partly inefficient because they have not considered the teacher's individuality? These misguided chieftains, in their indifference to teachers as human working units, have taken refuge in an appeal to the doctrine that "the schools are for the children, not the teachers," forgetting that when men and women are instruments they are not tools. Hence they have *used* teachers and *used them up*, spiritually at least.

So it has been with other difficulties. Our unfair and inexpert treatment of the just claims of book and supply houses has given some faint warrant for their appeal over our heads to the school boards, and for their appeal to other factors than the merit which we have not always been careful to consider.

After years of desultory and unrepresentative organization, are we not compelled to admit that the profession is without a code of ethics which is sound in principle or binding in its effects upon teachers?

How long shall the vital interest of public education continue to be without the corporate support of its professional members? The state has no more intelligent or conscientious set of servants than its teachers, yet how little their intelligence and conscience count in competition with meaner interests. However difficult the task may be made by scattered membership, short service, or other factors, it must be assumed at once. Already the possibility of a united and unselfish teaching profession is threatened by agitations for organization which would divide us in terms of sex, official position, and the relative stress we place on merely personal ends. Believing that the problem is urgent, I ask that the council give this problem its earnest consideration, and for the purpose of bringing the whole matter to definite issue I offer certain constructive proposals in the form of a far-reaching tentative plan.

TENTATIVE PLAN FOR THE ORGANIZATION OF AMERICAN TEACHERS

The need of organization.—The need is for a more adequate national organization of *all American public-school teachers* upon a permanent basis which will insure a day-to-day influence upon school affairs.

The central convention system must give way to one of local organizations with a capacity for frequent business and professional sessions. To maintain a democratic spirit in the organization, the organization should proceed from the bottom to the top, rather than vice versa. Local education societies should be the centers of activity, and all larger units—district, state, and national—should be merely a federation of these, the permanent operations of each of which should be delegated to a truly representative council of carefully selected leaders.

The method of organization.—Local societies of teachers (with associated laymen) should not be established by an arbitrary unit. The territorial

unit should be highly flexible, the one standard being ease of affiliation and attendance at meetings. In the country districts, the county system might be followed, but not strictly, ease of congregation by roads, railroads, etc., being taken into account. Towns should have their own societies. Cities of considerable size should have several so that the size of each could be kept so companionable that free discussion of professional problems is really possible. Coercion for some partisan purpose is always more readily resisted where all the teachers can easily know each other's state of mind.

The active membership in such societies should be limited to those who are actively engaged in the public educational service, because this profession is peculiarly linked up with the public service thru the state, as no other is. Any person specially interested in public education may become an associate member of an "education society."

There should be a state association of education societies in each state. The affairs of this state association should be vested in a council consisting of one or more representatives from each local education society. This council should meet annually for the discussion of professional affairs, and at that time should appoint an executive board of seven to administer their affairs thruout the year. There should be a permanent office in charge of a paid executive secretary. It will be advisable for the state association to have its own educational magazine as a medium of communication under a paid editor, and to maintain a bureau for the registry and placement of teachers.

There should be a national council of state education associations, consisting of representatives from each state. Each state council should select at large as many representatives to this council as there are senators and representatives in the national congress. They should meet annually for two weeks for the consideration of problems of public education, to determine matters of common policy and comity among the states, to initiate investigations into the efficiency of teaching and administration, to establish standards of efficient practice and professional conduct, to provide ways and means for gathering and disseminating professional information, and to attend to such other matters as have an important national scope. They should maintain a central office under the charge of a paid executive secretary, who will have an advisory executive committee of five associated with him to aid in administering affairs. This executive committee should be elected by the national council.

Conventions of education society members by districts or states might still be held annually or otherwise as the local societies might determine.

Support of organization.—All fees should be paid thru the local education societies, a certain percentage of which should be segregated for district, state, and national organization.

SPECIFIC POLICIES OF ORGANIZATION

The primary purpose of such organization is to increase the efficiency of education as a public service. And as a mode of attaining this chief end, *its secondary purpose is to improve the status of teachers.*

More particularly the organization should finally accomplish the following particular things:

1. To make professional efficiency in the public service the sole standard for employment, assignment, promotion, demotion, dismissal, and release of teachers.

2. To realize in practice the principle that all expert professional officers should be selected by appointment and not by popular election.

3. To remove the selection of boards of education from the domain of partisan politics.

4. To eliminate the pressure of textbook and supply houses from educational affairs.

5. To adopt such means as will finally eliminate the teachers' agencies (however useful and necessary at present) in the appointment of teachers, recognizing the principle that there shall be no splitting of fees for appointment with any person or agency whatever, and that the registry, recommendation, and appointment of teachers shall be in the hands of bureaus organized under conditions that guarantee the public good; e.g., appointment bureaus of normal schools, colleges, and teachers' associations.

6. To make it unprofessional for any teacher to use the influence of partisan or personal politicians, textbook or supply houses, teachers' appointment agencies, or any other means not calculated to render an unbiased and expert judgment. In fact, to make it unprofessional to use any argument for appointment save that of educational efficiency vouched for by someone in a position to render an expert judgment on the same.

7. To make it unprofessional to apply or seek for a position or to cause influence to be exerted for the same when said position has not been declared vacant by teacher, superintendent, or board.

8. To guarantee to the chief educational officer of any administration unit that he, and not the board of education, shall have the right to initiate action in all matters involving expert professional knowledge and judgment; e.g., the nomination of teachers, the recommending of a course of study, textbooks, apparatus, and other supplies made necessary by the pedagogical needs of the schools.

9. To improve and unify the standards and means of training, certificating, and appointing teachers, so as—

a) To insure that every teacher shall have received the cultural training of one more school unit than the school in which he teaches; e.g., elementary teachers should have at least high-school training, etc.

b) To insure that every educational worker shall have had some systematic training in the performance of the particular function intrusted to him.

c) To widen the provision for and increase the practical efficiency of courses devised for the professional training of teachers.

d) To provide for a better supervision of teachers in service so that the growth of the system in the care of new responsibilities shall not be lacking.

e) To work toward a more nearly uniform standard of certification thruout the states, so that interstate comity is possible in the recognition of certificates, thus relieving congestion and scarcity of teachers, and increasing mobility so that a wider selection is possible for both boards of education and teachers.

10. To abolish the election of teachers for a stated term, and substitute therefor a system of appointment to service wherein the presumption is that satisfactory service involves continuity of employment, that cannot be broken save by dismissal for cause. New appointees may be subject to review and dismissal within a stated time, but if not removed within the stated period they shall hold their positions on presumption of continuous tenure.

11. To establish the principle that contracts are mere fiscal arrangements for service, which do not imply a period of indenture wherein the freedom of movement of the teacher is interfered with. They simply guarantee a certain service for a certain pay and vice versa. The profession holds to the belief that our schools have a national purpose, and that the public good demands that a call to larger or more congenial service is a public and a personal right with which no board ought deliberately to interfere. Under such a principle it will be possible to enforce the ethical standards that suggest that no board or superintendent should seek the services of a teacher without consultation with the present employing authority, and that no teacher should seek another position without notifying the officials of his own system.

12. To improve the economic status of the teachers by favoring:

a) An annual salary system with twelve payments.

b) A minimum salary system.

c) A gradual increase in teachers' salaries over and above the increased cost of living.

d) A state-wide pension system with final comity between states, which recognizes service in other states, with a system of apportioning costs among states on the basis of proportionate service. And necessarily, therefore, to provide uniform pension legislation among the states as a preliminary stage.

DISCUSSION

A. Duncan Yocum, professor of pedagogy, University of Pennsylvania, Philadelphia, Pa.—In discussing so fundamental a topic as educational readjustment, it is necessary to hold in mind that it is possible in various interrelated forms. Concentration of attention on one, without equally serious consideration of others which it conditions and which condition it, not only may point the way to a too partial reform, but may result in new evils more serious than the old.

Dr. Suzzallo's admirable argument concerns itself with readjustment on the side of educational organization, and with that particular phase of organization which can far more readily transform the teaching force of the country into a powerful trade union swayed by class interest than into a professional body working for professional efficiency and dominated by professional ideals. I am inclined to think that the form of readjustment which he proposes is as inevitable as it is logical. It is democratic without being wholly microcosmic. Yet it is a democracy within a larger and a broader democracy. It insures popular representation within the teaching body itself, but will probably fail, even with an associate membership, to include those citizens not teachers who are as actively interested in educational issues as the teachers themselves. If it includes them, it ceases to represent class or profession; whether it includes them or not, it will be as dominantly feminine as the teaching body itself, and almost inevitably tend to represent, not only a class, but a majority which is in itself a class.

The chief difficulty which confronts reorganization is the maintenance and development of a truly professional form and spirit, when the immediate incentive to membership is more effective co-operation for salary increase thru legislative enactment. In the history of education, professional organization has resulted from the development of professional knowledge and spirit, rather than professional spirit from organization. The two must keep pace with each other. It is from this point of view that it is necessary to consider the relation of readjustment in organization to other phases of educational readjustment.

A nation-wide organization, whose development will outstrip the advancement of science, and whose local "guilds" will largely consist of relatively inexperienced teachers, must be guided with almost saintlike unselfishness and superhuman skill, if it does not, here and there, sacrifice both standards and ideals to small immediate gain, involve itself in entangling alliances with political organizations which will enslave the school, and make of the profession which should nobly serve the state but an organized social class struggling with others for the attainment of selfish tho righteous ends. Inherent dangers are no argument against democracy in organization, but strong reason for entering upon readjustment conscious of all safeguards against them. At least two safeguards are fundamental: systematic effort to insure in the general Association the dominance of professional as opposed to class spirit, and a fuller democracy of organization to parallel and complete its too partial democracy.

George R. Crissman, principal, Training School, Warrensburg, Mo.—Three distinct types of educational organizations are found in this country. The first devotes itself to the discussion of educational questions; the second deals with the organization and supervision of the teaching staff primarily for economic betterment; while the third combines these two features. The function of the first is professional instruction or intellectual improvement; that of the second is professional administration or economic improvement; that of the third is both. The first is the prevailing type being represented by the National Education Association and most of the state teachers' associations. The second is represented by the teachers' federations of Chicago, New York, Brooklyn, and twenty-nine other cities having thirty thousand population or over. The third is the newest and is well illustrated by the Ohio School Improvement Federation, and the California State Teachers Association, altho there are many others that are now recog-

nizing this double function. It is my purpose to demonstrate that this latest type of educational organization is the only one that can render to the profession the kind of service needed.

Present conditions repulsive to the kind of men and women needed.—We are a wage-earning, quasi-official body, but the principles of civil service that apply to all other groups of this character do not apply to ours. The whim of any influential patron makes the school teacher tremble because he has no protection. He stands alone, helpless; "like a sheep before his shearer, he opens not his mouth." Why this needless sacrifice and humiliation? They are positively immoral and harmful. So long as there is no permanency of tenure and no adequate support, home and families and community prestige are impossible. Most men and women of spirit, of culture, of ambition, and of native power will not become members of such a group.

Better conditions must be created by organization and co-operation.—This may seem difficult but it is by no means impossible. Several of the states like California, Ohio, Massachusetts, and others have made significant beginnings. It is clearly not a question of ability but of purpose and courage. Potentially we are a giant but kinetically we are a pigmy.

If this were a truly representative body, in close and constant touch with our 500,000 constituents, we could in less than ten years require every teacher in the land to have adequate professional training; we could make the average salary of teachers equal to that of the rural mail-carriers, about $1,000; we could make tenure of position depend upon efficiency only; we could attract men to the profession who are capable of splendid leadership and great service; we could then prove ourselves worthy educators (seed corn) creating intellectual, moral, and social character after our kind.

It is said that our chief business is with the children. We are to make strong, wholesome, useful men and women of them. A big job, you say. Then it calls for big people especially trained for it. Can they be supplied? Are we organized to get them? Big people and especially trained are not looking for $200, $300, and $400 jobs without the annual moving expenses. So our organization, or lack of organization, fails in its chief business. Is it not time we were organizing to bring things to pass?

Kind of organization needed.—We must have more permanency of position, more adequate compensation, a more select teaching staff, more professional preparation, and more efficiency of service. Educational principles and educational theory will not secure these things. These belong to the business side of our profession and they demand a business organization. We must have an organization that is on duty 365 days in the year, a sentinel for every danger, a captain for every battle, a publicity bureau to keep us in constant communication, a counselor for all our business relations, a personal friend when dealing with an unreasonable employer, an advocate to plead our cause at the bar of the public, an educational campaign manager to bring patrons and teachers into more sympathetic and intelligent relationship. In this organization, co-operation between our profession and our patrons should be the chief corner-stone; educational intelligence its foundation; public service its main structure. No group coercion or sordid commercialism should be hidden away in the vaults, and all must be hedged about with abundance of publicity.

Such an organization will at once command the confidence of both the people and the profession. We stated at the beginning that all the various educational organizations grouped themselves according to their aims and functions into three types: first, those that discuss educational questions; second, those that provide for the economic betterment of the profession; and third, those that perform both functions.

We have tried to show that this third type is the only one that renders adequate service:

1. Because conventions for the discussion of educational questions ignore the business side of the profession.

2. Because organizations for material betterment only ignore the intellectual and spiritual interests of the profession.

3. Because there can be no educational improvement worth while without a stronger teaching staff.

4. Because a stronger teaching staff cannot be secured under present conditions, the most objectionable of which are (*a*) precarious tenure, and (*b*) a miserable pittance of support, making impossible home and family life or community citizenship and influence.

5. Because these conditions destroy all *esprit de corps* in the profession.

6. Because effective organization is the only means of raising the standards of preparation and efficiency and of eliminating the unfit.

7. Because our present organization is unsatisfactory in dealing with the state, the people, or the children.

8. Because other groups, industrial and professional, have seen the necessity of organizing for economic betterment and have far outstripped us in the race of life.

9. Because a business organization in connection with the intellectual organization is the only means of securing group solidarity and professional prestige.

10. Because this third type of organization is the only one that gives sufficient recognition to the patrons as well as the teachers, thus avoiding group friction and group coercion.

Now what is the duty of the National Council of Education? To me it is clear. We should take the first definite step toward the realization of the things so greatly needed. In any forward step of a business character, this body should lead. The rank and file of our profession in every state have a right to look to us for suggestion and guidance. They would be greatly helped by our co-operation. Many are only waiting for courageous leadership such as this body alone can offer. We could supervise the organization of a great national representative body that would wield a tremendous influence in national educational affairs. We could render invaluable service for the economic betterment of the nation's teachers, if we had an organization which would put us in vital touch with the whole teaching force. With such an organization, we can do all things which in our wisdom we think ought to be done. The goddess of opportunity never came knocking at our doors more loudly than she does today.

Benjamin F. Moore, superintendent of city schools, Muncie, Ind.—This discussion has proposed an organization of American teachers upon substantially the same basis as workers in other professions and in the industries and trades of America are organized. While there has been some preliminary discussion of the plan, and a few meetings have been held, it has all been done to the end that a full and frank discussion of the whole question might be had in the broad-minded and dispassionate way which has characterized this meeting.

The idea of a delegate organization, as set forth by Dr. Suzzallo, is not entirely new nor is it untried. It is the principle upon which the industrial, professional, and political organizations of the country are based.

In most cities and in many states there are organizations of teachers on substantially this basis. Altho we admit that such organizations of teachers have, so far, been somewhat local and desultory, there has, nevertheless, been a pronounced sentiment for them. That there is a growing demand on the part of teachers for representation in the councils of their profession is evident. Is it not better that this demand be met in a rational way? That it be rationally directed? That its purposes be broadened? That it be diverted from all selfish ends prompted by local conditions, and that, instead of spasmodic outbursts, we have a rationally organized body, sufficiently broad in its purposes to command the confidence and support of the teachers of the whole country?

Much has already been done in creating sentiment for higher things even in local organizations. There would be ample justification for incorporating many of the objects promulgated by these local organizations into such a general scheme as here proposed.

The question may arise: What could such an organization accomplish?

It would command the support of practically all teachers of the country. Its benefits to them would be direct, immediate. They would recognize in it an organization worthy of their support. It would unite present desultory and independent organizations into a national body that would command the confidence and support of the entire profession.

It would mold and direct public sentiment for education beyond what it is possible for any present organization to do. Its membership would be national. Its influence would go to every school district in the land, carried there by one personally responsible for its acts and personally interested in its welfare.

It would strengthen local organizations by suggesting and bringing about larger things. Such an organization would inspire confidence in both the profession and the laity because it would be able to do things worth while.

It would make possible the securing of data for the solution of educational problems in a direct and reliable way. Members would be personally interested in collecting and submitting such data. Its use would advance that in which they are directly interested. Teachers would study the literature compiled from such data. It would be the literature of the organization of which they would be a part. The effects of such work would come directly to the teacher. Too often she is the last for its effects to reach.

It would create a bond of union among teachers themselves and between teachers and patrons beyond what is possible under present conditions. It would bring to teachers higher civil and social standing—bring about a deeper recognition of their worth to the community. Teachers would be better satisfied, more independent, less liable to unjust or unfair treatment, better able to defend themselves against unscrupulous attacks from designing politicians, and, best of all, they would be released from the domination of the agitator and the demagog in their own ranks.

With its large membership small assessments would provide ample means for carrying on the work. Its management, being in the hands of those delegated from local guilds, selected in dispassionate business meetings, uninfluenced by unscrupulous agitators or agents, would be economic. There would be neither hoarding nor dissipation of funds. Every dollar would be expended for the welfare of those who contributed it.

A question may be raised as to the relation of such an organization to existing organizations of teachers and school men.

We submit that its relation to all such would be that of co-operation, not of antagonism. So far as we know, no general organization of teachers covers the field proposed for this. It would not be necessary, therefore, that it supplant any other organization.

The discussion of Dr. Suzzallo differs very materially from the ordinary suggestion. It does not seek to tear down—does not condemn. It presents a worthy object for what it suggests, shows the need for it, and submits a perfectly feasible plan for its accomplishment.

This is not urged as a revolutionary measure. The complete development of the plan will take time. The important thing now is that we shall begin and that our beginning shall be upon right principles. This is certainly not the time to condemn the whole scheme because of differences as to proposed details of organization or management. Details can be worked out later. The big question now is: Will we accept the principle of local guilds and delegate general meetings as a basis for the organization of American teachers? We can then proceed with the development of the plan in accordance therewith.

The declaration of principles set forth in this discussion will command the respectful consideration of all school people. It proposes only that to which the true teacher and the true leader can alike subscribe. It provides equal opportunity for every teacher in the profession and invites equal activity on the part of every teacher for the profession's betterment. It provides for a general organization of teachers upon a workable basis. Its adoption will, we believe, mean larger things for American teachers, larger things for American schools.

REPORT OF THE COMMITTEE ON HEALTH PROBLEMS IN EDUCATION

THE SANITATION OF RURAL SCHOOLS

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It is the conviction of the Committee on Health Problems in Education of the National Council that there is no more important health problem in education than that which relates to the sanitation of the rural school.

The one-room country school is the oldest and most primitive type of school in this country. In the one-room rural schools are being educated 42 per cent of the school children of the United States.

The country child needs a healthful school environment quite as much as the children in the city. Many diseases formerly considered due to congestion of population are now known to be as prevalent relatively in the country as in the city. Typhoid fever is more prevalent in the country than the city. Scarlet fever, infantile paralysis, and some other diseases are as prevalent in the country as in the city.

In general, good architecture and good sanitation have been much more freely studied and much more frequently secured in the school of the city than in the school in the country, but the sanitation of the rural school is in every respect as important as the sanitation of the city school. The problems are at foundation identical. Both the city child and the country child need fresh air, good light, clean, wholesome, and attractive surroundings, but the methods of securing these educational essentials are somewhat different in relation to the two.

There are further two types of rural schools to consider: first, the one-room schoolhouse, and, second, the consolidated school with several rooms, one or more of which may be needed for a greater variety of purposes than is required of the conventional or the traditional schoolroom.

The country schoolhouse should be in appearance, in quality of attraction, and in essential characteristics as good a building as there is in the community. It should express the intelligent standards, the good taste, and the pride of a community quite as much as does the church, the town hall, or any public building. The country schoolhouse should be the most sanitary building in the district. It should be in all the factors influencing health as good as, if not better than, any private dwelling in the community. The civic pride in every community should find expression in some building of pre-eminent importance to the people as a whole, which should be a model in architectural attractiveness, in adaptation to use, and in sanitary excellence.

In this age of intelligent conservation of values, when the importance of child life is receiving greatest emphasis in the category of relative values, it is altogether appropriate that in either country or city the schoolhouse should be recognized as the most important building.

The building for the training of the young may be made in any community, by intelligent planning and without unreasonable expense, a structure of genuine beauty and a source of continual safety, comfort, and pleasure. All the features essential to the health of children in schoolhouses and grounds, in furnishing and equipment, are within the power of practically every rural community in the country to provide.

A schoolhouse without an adequate playground is an educational deformity and presents a gross injustice to childhood.

The location of the schoolhouse (with reasonable deference to the geographical center of the community) in anything but the most desirable and sanitary position available is altogether indefensible.

Neglect of anything essential for health in construction, materials, arrangements, and equipment of the rural-school building is an educational sin of omission, if not a social and civic crime.

The expense of the things which really affect the health of the pupil in school should be estimated in terms of child life, child health, and human efficiency, and only for convenience reduced to dollars and cents.

Observation of the rural schoolhouses in different parts of the country show many that violate most or all the principles of sanitation, and whose existence or use is a disgrace to any civilized community. There are many rural schools which are attractive and satisfactory when tested by all reasonable criteria. But a majority of the rural schoolhouses are unfit for use because of unsanitary conditions. In many sections of the country the average rural schoolhouse in relation to its purpose is not as well kept or as healthful as a good stable, dairy barn, pigpen, or chicken-house.

A county supervisor of schools in an old, conservative, and prosperous eastern state reports as follows some conditions of rural schools in his districts:

Schoolhouses ventilated entirely by windows, doors, and cracks.

Dry sweeping by teacher and pupils—seldom any janitor—teacher is thankful to have a decent broom.

Toilets: Small wooden building at side of school or in the rear. Often only a few feet from schoolhouses. Seldom any provision for vault, or dirt, or even to board up the under part. It *may* be cleaned once a year by some farmer. Locks are seldom provided. The building is open to tramps and other wayward people who both use and abuse the place.

Windows, provided there are any, are usually broken. Obscene marks and cuttings are common. Absence of such is worthy a day's journey to see whether the report be true.

Heating: Usually an unscreened wood stove stands in the central front of the room—battered and old, say ten years, twenty years, and, in some cases, fifty years, according to the date of manufacture on it. Stovepipe swings to and fro, and may come out, and school be delayed for a day or more at a time, until the committee can find time to repair it. The damper will not work, or is gone, and the teacher must have a terrific fire or none at all.

The opposition to closing one of these rural temples of learning and transporting the children is great. The mere suggestion of closing a school of five pupils in a building where the roof leaked and the privy-room had holes a foot across nearly cost me my position in that town.

Many of these rural palaces are squatters by the roadside, as neither the district nor the town owns any land aside from the public highway. No playground is provided except the road.

Quotation from a report of a special educational committee:

Your commission has been painfully impressed by the condition of many of the school buildings in the smaller towns of the state. They are old, unclean, offering no proper shelter, poorly heated, unventilated, associated with outbuildings offensive to the senses and sensibilities of child and adult alike—buildings of a sort which would not be tolerated for an instant in the case of a state prison or a county jail. Yet in these hovels are gathered together five or six hours a day the helpless little children for whose education the state has assumed to care.

It is apparent to the members of the Health Committee that the most effective text upon which to base a constructive report on "The Sanitation of Rural Schools" would be an accurate statement of actual conditions of rural schools from representative districts of all principal types and grades thruout the country.

The following features are considered most important for satisfactory sanitation of the rural school:

I. Good air.

a) Supplied abundantly from outdoors in all weathers.

b) Not warmer than 68° Fahrenheit in cold weather.

c) Heated (but not overheated) and kept in moderate motion by the operation of the jacketed stove.

It is a crime to shut in school children away from the health-giving influences of outdoor air. Outdoor air is the most valuable tonic known to man and acts constantly, not only thru the lungs, but as a continuous air bath affecting the entire surface of the body. Ventilation is a vitally important feature in the sanitation of the school.

A vitiated atmosphere lowers the vitality, increases the susceptibility to, and severity of, disease, and decreases the physical working power of the individual.

The depressed state of the organism under the prevailing conditions of badly ventilated schoolrooms not only predisposes to epidemic diseases, but the liability to, and the danger of, all diseases are intensified, and the vicissitudes of weather, which under favorable circumstances may be encountered with impunity, under these depressing circumstances become dangerous perils; and doubtless much that is attributed to the season of the year supposed to be predisposing to scarlet fever, whooping cough, diphtheria, and some other common affections of children, is due to the same cause.

II. Cleanliness—which not only influences physical health powerfully, but also produces important effects almost as directly upon mind and morals.

a) Dry sweeping or dusting is never justified.

b) Frequent scrubbing is indispensable.

c) Vacuum cleaning is desirable whenever possible.

d) Wet sawdust or oily mops should be used for cleaning floors. Damp or oily cloths are best for wiping off furniture and woodwork.

e) Clean bodies and clean clothing of pupils and teachers in addition to a clean schoolroom are necessary to make a sanitary environment for every pupil.

f) Flooding the schoolhouse with sunshine and fresh air in addition to thoro scrubbing and cleanliness are better than any form of chemical disinfection.

III. Water—pure and abundant.

a) Water should be as free for internal and external use, as health-giving, and as available as air.

b) Individual drinking-cups or, better, a drinking-fountain should be furnished in every rural school.

IV. Disposal of sewage.

Provisions for toilet accommodations and sewage disposal in every rural school should satisfy all essential sanitary requirements. The relation between water supply and sewage disposal in the causation of typhoid is too well demonstrated to be disregarded.

V. Lighting.

a) Light should be abundant and effectively controlled.

b) Windows should (1) be located at left, or at left and rear of the schoolroom; (2) extend to ceiling and provide a lighting area equal to one-fifth to one-fourth of the floor area.

c) Light should be controlled by double shades.

d) Direct sunlight should have access to every schoolroom some time during the day.

VI. Hygienic furniture, books, and materials.

a) Desks and seats should be individual, separate, adjustable, and clean.

b) Books and other materials should be not only sanitary but attractive enough to stimulate a wholesome response from the pupils.

VII. Screening against insects.

Mosquitoes may convey malaria and yellow fever germs.

Flies may convey germs of typhoid, tuberculosis, infantile paralysis, and perhaps other diseases.

Flees may convey bubonic plague.

Ticks may convey Rocky Mountain fever.

Every schoolhouse should be effectively screened against mosquitoes and flies.

VIII. Location, site, surroundings, and grounds.

a) With reasonable regard for geographical center of community, rural school should be located on site (1) well drained and away from stagnant water; (2) free from troublesome noise, unpleasant outlooks, or air contaminations; (3) protected (as well as may be) from unfavorable weather influences.

b) School grounds should provide sufficient space for play and games.

IX. Sanitation of the rural school requires not only a healthful building and well-kept grounds, but the intelligent and conscientious effort and co-operation of teacher and pupils for preservation and improvement (where possible) of all the health values in the school and the school surroundings.

X. The arrangements and equipment of the rural school should not only conserve in every vital way physical health, but should also favor in all fundamental particulars the social and moral welfare of all the pupils.

Factors important for securing and preserving the sanitary features of the rural schools:

a) Inculcation of ideas of sanitation in the minds of school officials who control the funds for the establishment and maintenance of the schools.

b) Education of the rural-school teacher, county superintendents, and rural-school supervisors. Introduction of brief course in hygiene and sanitation in normal schools and teachers' institutes.

c) Instillation in minds of pupils and parents of pride in, and enthusiasm for, the care and improvement of all measures favorable to health.

The present program of the Committee on Health Problems in Education appointed by the National Council includes the following:

1. An investigation of actual sanitary and unsanitary conditions of rural schools in enough districts of various types and conditions in a sufficient number of states to make the statistical results accurately representative of the rural schools thruout the country.

2. The employment of a working secretary who shall, under the direction of this committee, supervise the collection of the data by the most reliable observers available and then tabulate the statistics for the final report.

For the employment of this secretary and other necessary expenses, the Committee of the American Medical Association has generously agreed to duplicate any reasonable amount of money that may be appropriated by the National Council and the National Education Association.

An arrangement has been made with the United States Bureau of Education which will enable this committee to do all of its work with the full assistance and co-operation of the bureau. This arrangement will be of great advantage in the work of the committee and in the advancement of the cause.

3. The Health Committee plans to prepare a brief preliminary report of its program for the study of sanitation of the rural school, which will be issued by the Bureau of Education as a special bulletin, be ready for distribution before the National Education Association meeting in Salt Lake City next July, and serve as a basis for discussion at that meeting.

To make effective a study and report intended to be of assistance in the improvement of the sanitation of the rural school, the committee considers promising and important the following forms of propaganda:

a) Enlistment of interest of rural-school teachers in information and practice affecting health conditions.

b) Public lectures for parents, teachers, and pupils on health subjects in the rural schoolhouses.

c) Education of people generally by popular but reliable health material in the public press.

d) Encouragement of pupil interest and co-operation for the betterment of sanitation by organizations like a pupils' board of health, or a health militia.

DISCUSSION

J. A. SHAWAN, superintendent of city schools, Columbus, Ohio.—I have been requested by the chairman of the committee to present especially the plan of a militia of health among the pupils of the schools, as suggested by Dr. Burnham in his communication to the committee. Briefly stated, the objects of the organization are to secure personal health, a model school from a sanitary point of view, and healthful surroundings. The older-brother idea should predominate from the Seniors to the lowest grades represented. Training rather than instruction should be the chief end in view. The plan meets with the hearty approval of the members of the joint committee present and should receive the support of school people generally. In speaking of the plan, Dr. Burnham says:

It would be an excellent thing to have this plan tried in some one high school or in several high schools before any general organization were formed, and, if circumstances favor this, I would suggest that you might get some superintendent to try it in his own city.

More concretely my idea would be that the students organized into such a militia of health should first of all aim to make their own health and physical development as perfect as possible by trying plenty of physical exercise, sleeping out of doors or with plenty of outdoor air, eating proper food, taking adequate sleep, and avoiding things that would injure one's personal health. Second, they should aim to make their own school and school building a model of hygiene by doing what is possible for cleanliness, ventilation, and the like. Third, they should aim to make the surroundings of their own high school as sanitary as possible by destroying all flies, mosquitoes, and the like, and working for the highest degree of scientific cleanliness. Fourth, they should do what they might in looking after the health of the younger children in the school or in the neighborhood, this organization being first of all started among the Seniors and Juniors. Ultimately this plan could be extended, and could, perhaps, give a rational solution of the social evil in the high school, the older boys and girls endeavoring to look after the health and morals of the younger. The training in sex hygiene that would come from such a plan would, I fancy, be far better than much of the instruction that is sometimes given. In any case it would be an important supplement to such instruction. What we need in hygiene, as, in fact, in education generally, is not so much instruction, but actual training, not talk about hygiene and the like, but actual practice of hygiene and actual warfare against the causes of disease.

Ernest B. Hoag, M.D., state medical inspector of schools, Minneapolis, Minn., presented a report as follows.—The plan for the health grading of school children consists of two parts:

1. An outline for a partial health survey to be made with the aid of the pupils themselves, or in the case of young pupils with the aid of parents.

2. An outline for a more extensive health survey on the part of teachers.

In schools where a medical officer or nurse is employed, this outline will serve as a useful preliminary health survey.

With the employment of this survey no school need wait for the appointment of a medical officer or nurse before commencing some effective health work with school children.

It is desirable that the teacher should, in the absence of medical officer or nurse, make this survey as early as possible after the children enter school, but if necessary the teacher may take her own time and complete the survey of the children in her room at her own convenience.

It is desirable that this survey be made in the case of every child, but in any event the teacher should make it in the case of every pupil whom she suspects of being mentally or physically unsound.

The answers obtained to any one question may be of no particular significance but the answers taken as a whole will be of very great significance. The answers to questions in the same group are often of great importance; for example, it may be discovered that a pupil complains of headache, blurred vision, and inability to see easily what is written on the board. In such a case, the pupil is unquestionably suffering from a more or less serious eye defect; or again, it may be noted that the pupil complains of earache, running ear, and perhaps inability to hear easily what the teacher says. Such a group of significant points would indicate unquestionable ear disease leading to permanent deafness; a peculiar standing posture may indicate any one of a number of things, for example, spinal disease, weak muscles, beginning hip joint disease, etc.

The teacher is strongly recommended to make these surveys without attracting the attention of the individual pupil too much to the fact that he is under observation. The teacher will soon discover that her powers of observation in matters pertaining to the pupil's health will be greatly increased, and her attention will be called to many things of importance which she formerly entirely overlooked. As a matter of fact, one of the most important uses of this health survey consists in the fact that it trains the teacher's powers of observation.

When one or more conditions are discovered by the use of this survey, which in the opinion of the teacher require attention from the family physician, specialist, or dentist, a notice should be sent to the parents in the following form:

Date.....

Notice to Parents or Guardians:

.....appears to the teacher to be in need of .....attention. A further examination by your family physician, dentist, or specialist, is advised.

.....
Principal

.....
School

The parent will please sign here and return the notice to the principal.

.....

Health Survey

PART I

(Questions to be answered by Pupil or Parent)

Name.....School.....
Date.....Grade.....

Question 1. How old are you?
Answer.....
Question 2. Have you ever had much sickness?
Answer.....
Question 3. Are you well now?
Answer.....
Question 4. Do you eat breakfast every day?
Answer.....
Question 5. Do you eat lunch every day?
Answer.....
Question 6. Do you drink coffee?
Answer.....
Question 7. Do you drink tea?
Answer.....
Question 8. Do you have your bedroom window open or shut at night?
Answer.....
Question 9. Have you ever been to a dentist?
Answer.....
Question 10. Do you own a toothbrush?
Answer.....
Question 11. Do you use a toothbrush?
Answer.....
Question 12. Do you have headache often?
Answer.....
Question 13. Can you read easily what is written on the blackboard?
Answer.....
Question 14. Does the print blur in your book?
Answer.....
Question 15. Do your eyes trouble you in any way?
Answer.....
Question 16. Do you often have earache?
Answer.....
Question 17. Do your ears ever run?
Answer.....
Question 18. Can you hear easily what the teacher says?
Answer.....
Question 19. Is it hard for you to breathe thru your nose?
Answer.....
Question 20. Do you have sore throat often?
Answer.....
Question 21. Do you tire easily in school?
Answer.....
Question 22. Do you work any out of school hours?
Answer.....
Question 23. What kind of work?
Answer.....
Question 24. How much?
Answer.....

Health Survey

PART II

(Questions to be answered by the Teacher)*

	Yes	No
A. GENERAL APPEARANCE		
1. Is the child healthy appearing?		
2. Is his color good?		
3. Is he physically well developed?		
4. Is he free from apparent deformities?		
5. Has he a good standing posture?		
6. Has he a good sitting posture?		
7. Are the shoulders even?		
8. Does the child walk normally?		
9. Are the ankles straight when the child walks?		
10. Is the physical age of the child apparently equal to that of his actual age?		
B. MENTAL CONDITIONS		
1. Is the child normally advanced in school?		
2. Is he mentally alert?		
3. Does he answer ordinary questions intelligently?		
4. Does he play normally?		
C. NERVOUS CONDITIONS		
1. Is the child good tempered?		
2. Is he free from abnormal emotion?		
3. Does he have good powers of muscular co-ordination?		
4. Is the child free from spasmodic movements?		
5. Is he free from the nail-biting habit?		
6. Does he speak without stammering?		
7. Is he free from pronounced peculiarities such as irritability, timidity, embarrassment, cruelty, moroseness, fits, general misbehavior, etc.?		
8. Is he apparently free from bad sexual habits?		
9. Is he free from so-called "bladder trouble" (requests to "go out")?		
10. Is he usually free from complaints of headache?		
D. TEETH		
1. Are the teeth clean looking?		
2. Are the teeth sound looking?		
3. Are the teeth regular?		
4. Does the child use a toothbrush every day?		
5. Are the gums healthy looking?		
6. Are the upper teeth straight (not prominent)?		
E. NOSE AND THROAT		
1. Does the child ordinarily breathe with the mouth closed?		
2. Is he free from nasal chronic discharge?		
3. Is he free from "nasal voice"?		
4. Has he a well-developed face?		
5. Has he a well-developed chin?		
6. Has he straight, even teeth?		
7. Is the child mentally alert?		
8. Is he usually free from complaints of sore throat?		
9. Is the hearing good?		
F. EARS		
1. Does the child usually answer questions without first saying "what"?		
2. Is he fairly attentive?		

Indicate answers by a check mark.

PART II—*Continued*

	Yes	No
F. EARS		
3. Is he fairly bright appearing (not stupid)?		
4. Does he have a voice with good expression (not expressionless)?		
5. Does he spell fairly well?		
6. Does he read fairly well?		
7. Is he free from complaints of earache?		
8. Is he free from ear discharge?		
9. Is he free from any peculiar postures which might indicate deafness?		
G. EYES		
1. Are the child's eyes straight?		
2. Is he free from chronic headache?		
3. Does he do his work without fatigue?		
4. Is he free from squinting or frowning?		
5. Is the child free from postures which might indicate eye defects, such as leaning over too near the desk, holding the head on one side, etc.?		
6. Are the eyes free from redness and discharge?		
7. Are the eyelids healthy looking?		
8. Can the child read writing on the board from his seat?		
*9. Have the eyes been tested separately with the Snellen Test Type?		
H. DISEASES OF THE SKIN		
1. Is the head free from signs of disease (lice, ringworm)?		
2. Is the skin healthy looking?		
I. ERUPTIVE CHILDREN'S DISEASES		
The following points often indicate the early signs of transmissible diseases in children. They will, of course, not ordinarily be observed at the time of making this Health Survey.		
1. Flushed face	6. Nasal discharge	
2. Lassitude	7. Persistent cough	
3. Vomiting	8. Scratching of the skin	
4. Eruptions	9. Sore throat	
5. Red eyes	10. General aches and pains	

*Teachers may use their own judgment about this test.

W. A. BRANDENBURG, superintendent of city schools, Oklahoma City, Okla.—When we consider how little has been done to improve the sanitation and health conditions of the rural school during the last quarter of a century, and when we take into account how greatly dependent upon these conditions is the physical, mental, and moral welfare of the child, the subject at once appeals to us as one that has a legitimate right to engage our most serious thought and attention.

It is easy to criticize and point out imperfections in these respects in the rural school, but what can we offer to better these conditions? Is it possible in the rural community to have everything with respect to sanitation and physical environment that is enjoyed by the children of the city school? We affirm that it is not only possible but most practical to have everything and even more in this respect than has the city community. In our judgment the first step is to consolidate six or eight of these rural districts into one district. With little, if any, more than it would cost to build and maintain those six or eight rural schools a really up-to-date, sanitary school building could be built. This building should be built upon a wisely selected site, which should contain at least ten acres —why not? Land is one of the cheapest commodities of rural communities and it is

one of the most essential parts of the school plant. In this building every room should receive light from one side only. There should be an adequate amount of light—about one-sixth as many square feet of light space as floor space. Every window should be supplied with adjustable or venetian shades. In northern localities adjustable shades are preferable; in southern localities venetian shades may be used with profit. All walls should be tinted with appropriate colors. These should be selected according to the most modern and scientific intelligence in schoolroom decoration.

The heating system in such a building should be complete and modern with respect to both regulation and ventilation. The fan system should be used and should supply fresh air equal to the volume of air in the respective rooms every six to nine minutes.

In such a rural-school arrangement, medical inspection could be quite as successfully administered as in any school system, which would be a great step forward in the efficiency of the rural school. As little opportunity for even periodical bathing is afforded in rural communities between the freezing-over of the old swimming-hole and spring, provision for bathing should be made in this building.

Another thing that would prove to be of great merit and assistance, not only to the school but to the rural community, would be a well-equipped library. When we consider how little reading-material is found in the ordinary rural community, and how much time for the reading of good books country boys and girls have during the long evenings, Sundays, and stormy days, we readily see what a great opportunity would be offered in having a good library in every rural township.

Every such school should be provided with an assembly hall which should be large enough to accommodate two or three hundred people. A building thus equipped could easily become the real center of the social, political, and industrial life of the community. Here lectures could be given on all subjects of interest to the rural community. Who could estimate the value of such an arrangement for the rural community?

A part of the school site should be beautified, and a part supplied with play apparatus for the small children. There should be grounds for baseball, football, basket-ball, etc. There should be a modest, small gymnasium, or playroom, for use especially in inclement weather. Every rural school of this sort should be equipped for manual training, domestic science, and the study of agriculture. With such an equipment one more thing is needful. This one thing is competent teachers. No teacher should be employed to teach in a rural school who has not completed a normal-school course; and our normal schools ought to exist primarily for the training of the rural-school teacher; and there should be a law enacted in every state requiring the payment of a salary commensurate with the qualifications thus imposed.

Some of the results that would follow:

Practically every desirable thing now being done by all progressive school systems could be accomplished.

Far greater efficiency, physical, mental, and moral, would be brought about.

Subjects could be pursued, not merely textbooks studied.

A wider sympathy and closer and a more efficient co-operation among the people would result.

One of the needs of our nation today is a greater appreciation of the beauties, advantages, and the sacred influence of country life under favorable circumstances. Young children are often sent to the town or city school for their grammar-grade or high-school work just at that flexible and impressionable age when home ties should be strengthened rather than weakened—just at the age of visions and the fixing of life's purpose, when the threads woven into the fabric should come from nature and nature's God.

JOHN M. DODSON, University of Chicago, Chicago, Ill.—Permit me on behalf of the American Medical Association, which I am here to represent, to express the profound appreciation of that organization of the prompt and vigorous response of the National

Education Association to the suggestion, made at your San Francisco meeting, that you take up for consideration the health problems of the public schools. The Medical Association, thru its Council on Public Education and Hygiene, is seeking to disseminate, as widely and effectively as possible, knowledge of the recent advances in the medical sciences, and to arouse in the public intelligent and enthusiastic interest in preventive medicine. This the council is doing thru the public press, by sending weekly to several thousand papers carefully written articles on medical subjects, by public addresses before clubs, societies, colleges, schools, and other organizations, and in various other ways. The reasons for this movement are to be found in the nature and possibilities for good to the world in the recent progress in the medical sciences. This remarkable advance of the last half-century has added more to our exact knowledge of the causes of diseases than had been accumulated in all previous centuries.

The fruits of this new body of knowledge, in usefulness to mankind, lie almost wholly in the direction of prevention rather than of cure; of sanitation and hygiene, rather than of therapeutics. How great are these possibilities has been abundantly demonstrated in the last few years, most conspicuously perhaps by two events of the past decade. The first of these, taken from military life, is the experience of the Japanese army in the war with Russia. Following closely the disastrous experience of our own army in the Spanish-American War, and the equally deplorable record of the British army in the Boer War in South Africa, in both of which wars the loss from preventable diseases exceeded that from the casualties of battle by four or five to one, the medical corps of the Japanese army, given full authority to enforce the mandates of modern scientific sanitation, was able to demonstrate that disease among large masses of men assembled as in armies may be so controlled as to minimize the mortality and morbidity almost to the point attained under the best conditions of civil life.

The second notable demonstration of scientific sanitation has been afforded by our own experience in the Panama Canal Zone. The French, under De Lesseps, were obliged to abandon this great engineering project, mainly because of the awful mortality among their working force. Given full authority to institute and maintain sanitary conditions in the Canal Zone, Colonel Gorgas and his sanitary corps have converted this "veritable valley of death" into a land of health and comfort. So great has been the transformation that enthusiastic visitors have declared that "the foremost pesthole on the earth has become a health resort." The health reports from the Canal Zone for the last five years compare favorably with those from our better American cities.

Numerous other instances might be cited in proof of the effectiveness of modern sanitary and hygienic procedures—smallpox, by universal vaccination and revaccination, has been practically abolished from the German empire since 1875; typhoid fever has been for years almost unknown in the leading cities of Germany; yellow fever has been all but banished from Cuba, and no longer visits our own shores; cholera, for centuries a frequent and deadly visitor, has been effectually excluded from the United States.

With these facts in mind can anyone doubt the tremendous possibilities of sanitation and hygiene in reducing the sum total of sickness and death with all the attendant suffering and distress? Of the 1,500,000 deaths which occur annually in the United States, about 600,000—two-fifths of the total—are due to preventable disease. It is safe to say that if the knowledge which we now possess of the causes and modes of dissemination of these preventable diseases could be effectively utilized, with the universal co-operation of every individual, these diseases could be almost wiped out in a few years.

If any progress is to be made in this direction, however, it must come mainly thru community rather than personal hygiene, by means of the enaction and enforcement of sanitary legislation, municipal, state, and national. In a democracy like our own such laws can be enacted and successfully operated only when they are the outgrowth of an intelligent and earnest general demand by the people for such legislation, and a hearty

co-operation in carrying out the regulations enacted. The most fundamental and essential step, therefore, in securing better sanitary and hygienic conditions is the universal education of the people along these lines. Such education is most effective among the young. We cannot hope to accomplish a great deal in the present generation, but if the coming generation can be instructed in these matters, convinced of the great possibilities of preventive medicine, and aroused to an energetic demand for improvement, there is no measuring the possible good which may be accomplished. Herein lies the opportunity of the great body of teachers represented in this National Education Association. If the coming generation is to be instructed along these lines of sanitation and hygiene, and is to be aroused to effective action it must be accomplished very largely by the teachers in our schools.

I should like to elaborate on some of the points in the report of the committee as presented by Dr. Wood, and first, let me say, that the rural school should serve as a model of sanitation and hygiene to the whole community. More and more the schoolhouse is becoming the social center especially in the rural communities. Centrally located with attractive surroundings, it should serve as an object-lesson to everyone in the district. This fact may warrant the institution of measures which might not seem immediately indispensable for the welfare of the pupils.

I would call particular attention to the need of facilities for cleanliness—provision for washing the hands and face after out-of-door sports at recess. This should be by running water whenever possible, rather than by washbasins or bowls, and it is gratifying to learn from President Kirk that such can be provided without large expense. Individual towels should be insisted upon—each pupil providing his own towel. The roller or other towel used in common by many children is at least as dangerous an avenue of contagion as the common drinking-cup, which is now, happily, being consigned to oblivion.

The exclusion of insects—flies, mosquitoes, and the like—by screened windows and doors is all-important. The demonstration by Ross, Bignami, and others that the malarial organism is transmitted by a genus of mosquito, and in no other way; the brilliant demonstration by our own army surgeons, Reed, Carroll, Lazear, and Agramonte—names which every true American must hold in everlasting honor—that yellow fever is conveyed by another genus of mosquito, and by no other means; the evidence presented by Dr. Ricketts, another noble American martyr to the cause of science, that the mountain fever of the Bitter Root Valley is conveyed by the tick; and that the dreaded typhus fever—the *tarbadillo* of Mexico—is transmitted by the louse; the convincing proof that the plague is conveyed by the rat flea; and that typhoid fever and other infections are frequently spread by the fly; the positive proof that the terrible sleeping sickness of Central Africa is transmitted by the tsetse fly—these, and other similar demonstrations, have afforded overwhelming proof that the fly, the mosquito, the tick, the flea, the louse, the bedbug, the cockroach, and possibly other insects are not simply annoying nuisances, but are dangerous pests, to be destroyed and excluded from our homes and from contact with our bodies by every possible means.

In conclusion permit me to express again the gratification of the medical profession, as represented in the American Medical Association, over the active interest which this National Education Association has manifested in the vital health problems associated with our schools. We pledge you the hearty support and co-operation of the medical profession, financially and in every other way, in the furtherance of this great movement.

REPORT OF THE COMMITTEE ON TESTS AND STANDARDS OF EFFICIENCY IN SCHOOLS AND SCHOOL SYSTEMS

GEORGE DRAYTON STRAYER, PROFESSOR OF EDUCATIONAL ADMINISTRATION, COLUMBIA UNIVERSITY, NEW YORK, N.Y., CHAIRMAN

Educators and laymen have always expressed opinions with respect to the efficiency of our schools. In recent years there has been developed, along with a refinement in the technic of investigation in education, a remarkable public interest in the attempts to evaluate our educational practice. School inquiries, investigations, or surveys have been conducted, or are planned, in a great many cities thruout the United States. In each case there is the supposition that such an inquiry or investigation will measure the efficiency of the schools. It has not always been clear, either to those making the survey, or to those who read the reports, that three distinct types of measurement have been employed, or three sets of standards or tests applied. It is possible to characterize each investigation, or each part of some of the larger surveys, by one of the three following methods of measurement: first, measurement by personal opinion; second, measurement by comparison; and third, measurement by more or less well-established standards or units.

Measurement by personal opinion is valuable in just the degree in which the person passing the judgment is, by training and experience, qualified to give an intelligent opinion. Such personal judgments have frequently suggested comparisons with other communities, and have at times, no doubt, been based upon more or less well-established standards. The chief characteristic of this type of report, however, is found in the fact that the author does not feel that it is necessary either to appeal to a painstaking comparison with other similar situations, or to state the standards which he uses in passing his judgment. Often the individual who is expressing a personal opinion seeks to give dignity to his statements by saying that he speaks in terms of facts. In effect, his argument is that the situation as he sees it and as he has described it leads inevitably to a conclusion with respect to the strength or weakness that has come under his observation. Of course, no such appeal to facts can modify the situation. Unless careful comparisons have been instituted, or commonly accepted standards applied in passing the judgment, the opinion expressed in the light of the so-called facts which have been discovered remains simply an opinion.

Measurement by comparison is based upon the fundamental idea that the common practice is the result of the judgment of many men who have attempted to solve the same or very similar problems. In reports which have used the method of measurement by comparison, the most common practice is used as the standard to which each local situation is referred. Such comparisons have been made with regard to expenditures, the progress and classification of children thru the grades of the school system,

the amount of time devoted to school subjects, supervisory provision, teacher-training, tenure, and the like. In the derivation of standards of efficiency, it will always be necessary to employ the comparative method. Any adequate derivation of standards will, however, involve much more than comparison. Measurement in any field is not successful merely because we are able to say that one quantity is more or less than another. It is only when we have a measuring-stick which enables us to describe all of the quantities with which we deal in terms of definitely determined units, that we can claim to have any adequate method of measurement.

We are only beginning to have measurements undertaken in terms of standards or units which are, or which may become, commonly recognized. Such standards will undoubtedly be developed by means of applying scientifically derived scales of measurement to many systems of schools. From such measurements it will be possible to describe accurately the accomplishments of children and to derive a series of standards which will be applicable to varying groups of children and to different social demands.

Standards of accomplishment will always be stated in terms of group measurements. For example, we shall not demand that all children in a given grade be able to write with a certain speed and with a certain degree of excellence, nor that they all be able to perform a certain number of operations in arithmetic with a fixed speed. We shall, rather, measure the abilities of the group in terms of a central tendency, possibly the median or mode, and in terms of variability from this most common or median ability. The derivation of standards and their application to school situations does not mean that we shall attempt to make all children alike, or to secure the same product in every situation. It will be possible, however, for one who has some appreciation of statistical method, to compare groups of children, either within the same school system or in separate systems of schools, with respect to any ability or quality which they may possess, with even greater assurance than we have any right to have in comparing two individuals.

We may expect to develop standards or tests of efficiency in the several different fields, or with respect to the several different elements which constitute a school system. It will not be wise to attempt to measure one element in the situation out of relation to others, since each part of a school system is not only related to, but in some measure determines, the efficiency of every other part. For example, we might consider the problems of business administration as distinct, and yet we know that successful business administration will determine in no small degree the efficiency of work done in classrooms. It is only when buildings are properly constructed, lighted, and ventilated, when supplies of the right sort are purchased and properly distributed, that we can expect to do satisfactory work. In like manner, the accomplishment of groups of children in the several subjects which we teach, and the number of promotions or non-promotions, may be determined in considerable measure by the enforcement of the compulsory education

law. In any attempt to measure the efficiency of a system of schools, it will therefore be necessary to include in such a survey all of the problems commonly considered under the head of business administration, educational organization, the recruiting of the teaching corps, and the accomplishment of children. It is not probable that it will ever be possible to establish a single standard or unit of measurement, the application of which may be thought to determine the efficiency of a school system.

The business management of a system of schools is to be judged by the adequacy of the system of accounting and of reporting which is used, just to the degree that such records are a measure of business efficiency in other lines of human endeavor. In so far as we have commonly accepted standards for school buildings, one may judge of the efficiency of the school plant. Efficiency may further be determined by the degree to which the business management has succeeded in standardizing supplies and equipment to the end that waste is eliminated. It cannot be too strongly urged that neither expenditure per unit of population nor expenditure per pupil measures the efficiency of a school system. The question is always, not the amount spent, but the return secured for the money expended. The development of standards in business administration will be made possible when we have more adequate reporting in this field. Any comparative study which might lead to the development of standards of efficiency can be made only upon the basis of a large degree of uniformity in accounting and in reporting fiscal statistics.

From the standpoint of the enforcement of compulsory education, which is, in effect, putting children in touch with the education which we provide for them, the efficiency of a system of public education is measured by the ratio of the number of children in school to the number of children in the community who ought legally to be in attendance. If legal restrictions, control by agencies outside of the school system, or the lack of funds renders impossible the enforcement of the compulsory education law, one cannot charge that those who are responsible for the administration of public education are inefficient. It is not probable that any city of considerable size can hope for efficiency in this respect without the establishment of a continuing permanent census.

Efficiency in school organization demands that children be differentiated with respect to their mental, physical, and moral capacities. It is relatively simple by physical examination to determine the need for classes for the tubercular, the blind, the deaf, and the crippled. The fact that special types of education must be provided for these several groups is easily established. It is not quite so simple to determine the adequacy of the means or methods employed in the classes in which these children are found. We may, however, expect, in the light of further experience with classes for these children, to develop standards as adequate as those which we apply to groups of normal children.

Children who are mentally defective can be discovered by tests which are more or less commonly accepted. The Binet-Simon tests are being applied thruout the United States for this purpose. It is probably not more difficult to discover children of superior ability, and it would seem just as legitimate to judge of the efficiency, with respect to school organization, of a school system in terms of the provision made for supernormal children, as in terms of special classes for defectives.

Moral delinquency demands special treatment. We judge the efficiency of the organization of a school system not infrequently by the provision which is made for those who are habitually truant, or who are incorrigible. We should more frequently judge the efficiency of schools which attempt to reform the morally delinquent in terms of the later activities of the individuals placed in these special schools. We may claim to have reformed a boy or girl only when we know, because of our careful system of following up these special cases, that they do not revert to those practices which we originally sought to eliminate.

We are coming to recognize the need for a differentiated curriculum for children who have finished their elementary-school course. It is not easy in the newer types of industrial, household arts, agricultural, or trade education, to determine the needs of the community or the special aptitudes of children. Any adequate solution of the problem of vocational training will necessitate careful vocational surveys and the largest possible opportunity for the discovery of the special abilities of children. It is interesting to note that many of those who are studying the problem of vocational guidance are coming to speak more in terms of the discovery of special ability in order that adequate training may be given, than in terms of places for children to work.

One of the most common tests which has been applied to school systems during recent years is found in the percentages of retardation, elimination, promotion, and non-promotion. These statistics do not, either singly or taken all together, measure the efficiency of the school system. They are rather symptomatic. A large degree of elimination or retardation is significant mainly in showing the need for changes in curricula or in school organization, in calling attention to a lax enforcement of the compulsory education law, or in showing the need for modifications in standards employed by the school system. We shall, of course, continue to follow closely the statistics of elimination, retardation, acceleration, and promotion. Every competent administrator will introduce cumulative record cards which will enable him to trace accurately the history of all children thruout their school course. Such information will always be valuable, even indispensable, to one who would study carefully a school situation. We shall have gained greatly, however, when we learn to consider these facts as symptoms rather than as final measures of efficiency.

It has been suggested that the efficiency of schools be measured in terms

of medical inspection, dental inspection and treatment, the provision for playgrounds and recreation, the satisfaction of children's needs in terms of meals and clothing, and the provision for the education of youth and adults. It is unfair to judge a school system as efficient or inefficient in terms of any one of these activities except as the community concerned has recognized these activities as belonging to the school. If the social group has determined that these functions shall be added to those commonly belonging to the school as an institution, then it will be possible to measure the efficiency of each of these lines of endeavor by standards which we may hope to derive.

Considerable progress has been made in recent years in measuring the accomplishment of children in the subjects which are taught in our schools. The problem here is to come to recognize the necessity for group measurements and group standards. Such measurements will involve the idea of progressive increase in achievement and of central tendencies and variability within the group. Often such tests of efficiency will be most significant in comparing the units of a single school system. The work of Stone and Curtis in arithmetic, the scales for measuring the quality of merit in handwriting by Thorndike and Ayres, and the scale for measuring English composition by Hillegas are especially noteworthy.

The measurement of the efficiency of the work of individual teachers has received considerable attention in recent years. It is essential, if superior merit is to be rewarded, that a scale for measuring the work of teachers be established. The scale proposed by Professor Elliott has been successfully used by many superintendents and supervisory officers. The further use and criticism of this scale should result in the establishment of a satisfactory measuring-stick in this field. In the application of scales for measuring the accomplishment of children, we have a valuable supplement to the scale for measuring the efficiency of teachers. Doubtless both scales will need to be used by anyone who hopes to compare adequately the work of the individuals who constitute any teaching corps.

The more we attempt to establish standards and tests, the more insistent we will have to be that our practice be carefully described in the records which are made by teachers and supervisory officers. Such material will be most significant for school systems which have organized as a part of their administrative system a bureau of investigation. Indeed, the administrative or supervisory officer of the future may be expected to act largely in terms of measurements, which enable him to judge accurately of the efficiency of any element or part of the school system of which he has charge. We may expect that a group of capable investigators will work under the direction of the superintendent of schools to the end that he and the community which he serves may have constantly available the most adequate information possible with respect to the efficiency of the school system.

It may not be claimed that the measurement of the several parts or elements of a school system necessarily indicates the efficiency of those charged with the administration of our schools. It may be that a school system is inefficient because a community is relatively poor, or unusually lacking in progressive leadership. Unusual facilities for the development of a most excellent system of schools may be provided by virtue of the superior intelligence and the large resources of the population of another school unit. The most significant measure of efficiency is progressive development or improvement within the system of schools measured.

Greater progress will be made in the establishment of standards and tests, and in the development of more adequate measurements of the efficiency of school systems, when we establish a committee, a board, or commission on school efficiency. It is of the utmost importance that this committee or board be representative of the most significant scholarship and of the best administrative practice known to our profession. This body should be constituted by the National Council of Education. Its functions should be as follows:

1. It should offer encouragement, expert advice, and opportunity for publication to those engaged in scientific work in the direction of the derivation of scales of measurement, in the application of such scales or units to actual school situations, or in the establishment in any other manner of standards in relation to public education.

2. It should offer expert advice with respect to the nature and scope of surveys, investigations, or inquiries, to be undertaken in any part of the United States.

3. It should offer to members of our profession engaged in administrative work the opportunity to secure a scientific investigation of their systems of schools under the direction of professional experts. As the situation is at present, we have the anomaly which permits a politician, an interested book-publishing company, or a personal enemy of the chief administrative officer of a school system to attempt to secure the removal of such an officer without any adequate measure of the efficiency of the school system or the accomplishment of the man whose work is called in question. The establishment of a body of professional experts would in time render such action impossible.

For the work of a committee or board such as is contemplated in the statements made above, a liberal appropriation should be made by the National Education Association, and it is possible that further endowment should be sought in order to make possible those activities which will mean the increase in efficiency of our system of public education and the establishment of our profession.[1]

[1] This report together with a bibliography of more than three hundred titles is printed by the United States Bureau of Education as *Bulletin No. 13*, 1913.

DISCUSSION

EDWARD C. ELLIOTT, University of Wisconsin, Madison, Wis.—The ultimate problem of this committee is not that of establishing procedure or defining tests; rather it is that of creating a new kind of confidence on the part of the public in the work of the public schools. This confidence constitutes the capital with which the efficient school system must develop its dividends and activities. Many recent educational events have contributed to a weakening of that bond of trust that must ever obtain between the community and its fundamental institutions.

In devising tests and formulating standards, this committee must constantly have in mind the intelligent and public-minded portion of our citizenship. These tests and standards, however technical in character and object, must not have their significance clouded by esoteric verbiage. Our people of today want to understand what their educational system is, and what it is supposed to do. The ultimate worth of the efficiency principles and devices must be measured by the extent to which they are brought within the comprehension of the typical layman. Our aim must be the bulwarking of the cause of public education by a new common confidence in the performance of schools. This new confidence cannot be sustained upon vague theory nor upon standards that are established in defiance either of scientific procedure or of common-sense. If our schools are to have credit for their work, this new confidence must obtain; if our school systems are entitled to the new confidence, they must have these new tests and standards.

CHARLES S. MEEK, superintendent of schools, Boise, Idaho.—I should like to give the experiences of Boise, Idaho, relative to the discussion of expert surveys.

Dr. Elliott, Dr. Judd, and Dr. Strayer were employed by the board of education to make an expert survey of the school system. Two of these men spent a week in the community, and Dr. Elliott remained ten days. They submitted a report that is very valuable to the board of education and to the taxpayers of the community. Many valuable suggestions for continued improvement are made. These three men came into the community in a sympathetic attitude. They were helpful at every point.

Commenting on that report, the president of the board of education, who is an expert in matters of irrigation law and irrigation investment propositions for bonding houses, said:

I am glad to see that education has at last reached such a stage of development that it is indeed a profession. The report these three men have made to the board of education will certainly compare favorably with expert reports made by engineers, etc. Their standards are sensible and sane. They attempt to standardize only those elements that are indeed measurable. Their language is simple and all their findings may be easily understood by any layman. They have indeed rendered a service to the school and to the community. . . . . The report is worth ten times what it cost us.

The teachers were all enthusiastic and are eagerly following all suggestions made. They see now more clearly than ever before that there are certain elements in school administration that may be standardized. All are united to do teamwork for increased efficiency as never before.

The comparisons these men made with other cities, as on expenditures, have placed us in an entirely defensible position before the taxpayers and will convince even the most critical that we are not spending too much money, and that the results that we are getting are certainly commensurate with the expenditures made.

If school authorities generally would secure expert advice rather than fight it, they would not have to submit to the humiliation of having it forced upon them by taxpayers' leagues from the outside.

C. N. KENDALL, state commissioner of education, Trenton, N.J.—The Council has done well to appoint this committee to attempt an inventory of the factors which measure school efficiency.

I venture the opinion that any serious discussion of standards and tests will have a salutary influence upon the public, upon school boards, upon teachers, and upon superintendents. I believe the day is past when any system of schools, municipal or state, can safely ignore analysis of its results.

Taking it for granted that we realize that some of the potential values of a school cannot be fixed by tests or standards, shall we ignore all tests and standards? Because tests and standards have their obvious limitations, shall we refuse to accord them a place in our administration of schools?

The committee has directed attention to factors in efficiency which can be tested or measured. One of these is the school building or school plant—the equipment, the provision for playgrounds.

A survey may be worth all it costs if it reports upon the need of a gymnasium in a high school; that the seating in the primary schools is such that the legs of the children dangle in the air; that the janitor service is sloppy; that some of the buildings are fire-traps; that the toilet accommodations are immoral and indecent; that the ventilation is bad; that the lighting is impairing eyesight; that the playgrounds are inadequate; that primary teachers are handicapped by lack of supplementary reading; that the alleged commercial department is without suitable furniture; that the industrial-training equipment is insufficient.

There is enough agreement of opinion among men and women in this room to form a workable basis for reporting upon these conditions. Whether the community will sit up and take notice or not is another matter.

Another factor, or group of factors, comes under the head of school organization. Here, too, it seems to me there is enough agreement to form a substantial basis for standards.

What are some of these?

The number of children of legal school age who are in school, taking into account private school enrollment. The suggestion made by the committee that there be a permanent school census is an excellent one. That city or state which shall be the first to point the way to such a census, accurate in detail, will perform a distinct educational service.

School attendance in relation to efficiency can be reported upon with assurance. Retardation, elimination, and promotion may be reported upon in a similar way.

The relative cost of schools in different cities, the system of accounting, the efficiency of the business department may well be reported upon.

The number of children taught by the individual teacher is a factor of far-reaching importance affecting efficiency, which in my judgment has not received the consideration it deserves.

The necessity of special schools for varying types of children is becoming accepted as a test of efficiency in organization, depending, of course, upon the extent of the system—schools for mentally defective children, schools for truant children, schools for children who are retarded, schools for the alert and especially capable children, different types of schools in the upper grammar grades and in the high schools, as commercial departments, academic departments, industrial departments.

Summer schools, continuation schools, opportunities by means of playgrounds and recreation centers may enter into our estimate.

The report, however, should make clear that the blame is not always to be laid at the superintendent's door if these extra activities do not exist. Public support or public funds may be wanting to carry on these activities. Moreover, we should be on our guard in estimating the efficiency of a school system solely by the number of special activities found therein.

Here, then, is a group of factors under school organization which it seems possible and reasonable to test in terms generally acceptable.

When we come to the course of study, greater difficulties begin to appear. The kind of industrial training is one, but the necessity for this training is a settled question. A school system without provision for industrial training can readily be judged as partially lacking in efficiency.

Courses of study in high schools which relate to life, in which there is motive, which appeal to the interests of young people, do not seem to be generally agreed upon so far as I have been able to observe, altho we have been talking about it for some time.

Reading, English composition, handwork, spelling, music, drawing seem to be well defined in the first six years or grades; but in the higher grammar grades, how much geography, how much English grammar, how much literature, the amount and kind of history, civics, elementary science, the scope of industrial training, are still open to difference of opinion among very competent people, even experts.

However, the opinion may be expressed with considerable confidence that enough is settled to make possible a report upon efficiency as to the course of study.

Absence from a course of study of suggestions for its interpretation, and absence of suggestions as to the elimination of obsolete material, is not a sign of efficiency; neither is the absence of suggestions for correlation of study a sign of efficiency.

What about standards and tests applied to the teacher—the one important factor in the school? It would seem that there might be substantial agreement upon the following:

Salaries
Requirements, academic and professional, for entering the service
Provision for improvement of teachers in service
Opportunities for study and the like
Method of appointment
Politics or "pull" in appointment, transfer, and dismissal
Pensions

On the side of instruction, it would seem that standards and tests may be formulated as to the character of the instruction. Dr. McMurry has attempted this in the New York report.

I suppose there would be universal agreement that there should be evidence of the play spirit in primary schools, and cultivation of initiative, of the spirit of freedom, of habits of straight thinking, in the work of the teacher in all schools. Habits of study, ability to use books, the working power of children may to a certain extent be evaluated by wide observation in many schoolrooms of the system under investigation. The character of the appeal to children's motives and interests in the instruction may be similarly determined.

These relate obviously to processes in teaching.

How far, however, the influence of the teacher extends in the cultivation of ambition, of self-direction, of moral courage, of regard for the rights of others, of sweetness of temper, of self-denial, and of social consciousness—in a word, in the building-up of strong and robust habits; how far these may be measured by any body of experts or investigators is extremely doubtful. And yet all this enters into the rating of efficiency.

The public is interested in what the children know, in what they can do, in the degree of their skill, in how they read and spell and work problems and write letters, in how well they know some of the essential facts in geography and United States history. Public questioning here cannot be ignored in testing, surveying, and investigating.

There are two great sources of waste in schools, both elementary and high schools, in connection with instruction: first, forcing adult standards upon children by means of the course of study, and secondly too much activity by the teacher and too little by the pupils. A survey should not ignore these conditions.

The committee suggests three methods in determining the value of the teacher's work: personal opinion, comparison with other cities, and measurements by established standards.

The first two are of value, but their limitations are obvious. The last method, measurements by established standards, suggests the question: Have we such established standards that are reliable or dependable?

The character of the supervision is another vital factor not to be omitted in our estimate of school efficiency. Some qualities in this important field are such that they may be summed up, defined, or reported upon. As to other essential qualities in supervision, can we be sure that they can be evaluated in a report?

In conclusion, I wish to advance five propositions:

1. A system of schools should have, under the leadership of the superintendent, its own local machinery for testing and investigating. A trained educational statistician might well be on the superintendent's office staff, or available for his use. A committee of laymen, citizens appointed by the board of education upon the recommendation of the superintendent, might, with the co-operation of the superintendent, present a survey of value. The report of such a local body, it is true, would probably take on local color or prejudice, but it could make some contribution. I do not wish to convey the impression that it could do as effective work as an outside body, but it might be a sort of clearing-house between the superintendent and public opinion which would strengthen the hands of the superintendent.

2. The survey should take into account purely local conditions which have affected school efficiency; for example, rapid growth in population, the character of the foreign-born population, lack of public funds to establish and maintain vocational training.

3. The report should not fail to recognize the achievements of the schools. This is due to the public, to the superintendent, to principals, and to teachers. Nothing will bring educational surveys into disrepute more surely than a survey which summarizes the work of the schools in the words of a college professor who recently passed judgment upon schools in such a discriminating statement as this: "The schools are absolutely rotten."

4. The survey should clearly indicate whether the general movement of the schools in spirit and results is in the direction of increased efficiency. The element of comparison should not be left out. Comparison with other cities? Yes. Comparison with previous conditions in the same city? By all means, yes.

5. The investigation should preferably be made by at least three persons. An adverse report will carry farther, in my judgment, and be received with more confidence, if it is the combined opinion of a group of persons than if it is the opinion of one man, however capable and conscientious he may be.

The committee raises the question whether the Council should appoint a committee on standards and tests, and one on educational surveys or investigations.

The purpose of such a committee, as I understand it, would be to offer counsel or advice to communities or cities, proposing surveys of their respective school systems. Such advice or counsel is needed. This being the case, I believe that this Council, a professional body, representing the country at large, might well, thru an appropriate committee, act in this professional capacity.

I believe that the committee has rendered a valuable report, that the Council should recommend that it be continued, and that it be authorized to make still another report upon tests and standards for efficiency one year from this date.

Ben Blewett, superintendent of instruction, St. Louis, Mo.—The membership of the committee submitting this report represents the scholarship and practical experience competent to consider this question of surpassing importance.

The report of the committee in its painstaking and judicial consideration of the subject, and in most of its conclusions, justifies the expectations aroused by its personnel.

Centuries ago the wisest of all teachers said: "By their fruits ye shall know them." The value of all human endeavor must be judged by what proceeds out of it. There seems to be no conceivable reason why schools or school systems either must or should be exempted from this universal test. The difficulty in this instance, as in many others, lies in not discriminating between stem and twig, and flower and fruit.

The report is, however, disappointing in at least one of its conclusions and certainly in some of the things it omits saying.

If I may venture to summarize the conclusions, they are:

1. That any school or school system may be justly measured in the functioning of its several activities.
2. That one standard of measure that can test its efficiency as a whole is impossible.
3. That the measures applied must be standards in the several and respective activities.
4. That these standards must be established by some bureau, committee, or group of experts selected because of ripe scholarship and broad experience in administration.
5. That varying conditions in social groups are factors in the results.
6. That an unrelated money value cost unit is a meaningless and mischievous standard of measure of results in any of the activities of a school system, even in those activities having to do with such material things as cost of buildings and supplies.
7. That the community shares with the schoolmaster in the responsibility for the efficiency or inefficiency of the system of schools.

The report is disappointing in its second conclusion. While it is true as far as it goes, it is misleading in not going far enough. No one test can prove that the piece of metal I have on my laboratory table is gold, but there is one test by which I can prove that it is not gold.

If it will not resist the drop of acid, I know that it is base, not pure. Tho we cannot be assured that a school system is efficient because it stands the test in any one, two, or more of its departments, or in some of the subjects of its curriculum work, its failure to show one dominant purpose or aim for its whole work is conclusive evidence that it is inefficient. Nor is the conclusiveness of the evidence vitiated by any question concerning the adequacy of the purpose or aim of any part of the work.

If there is not this one principle that binds the parts into a co-ordinated whole, there is without question a chaos instead of a system, a game of chance instead of a law of order. I do not believe the committee will object to this amplification of its position on the use of one single test of efficiency. If I am not wrong in this belief, I may with propriety express the regret that the committee did not discuss the possibility of an agreement upon a dominant purpose or aim, the absence of which would be an infallible indication of inefficiency and whose presence would suggest the presumption of efficiency.

Is there not already practical agreement, not only among teachers, but of the citizens of the state with the teachers, that the only justification of the support of a system of schools by the state is that there is no other way in which the democratic state can so well provide for its stability, development, comfort, and happiness. And is this not on the theory that the product of the schools shall be a youth who will respect himself and his fellow-men, who has a positive will under rational control, whose intellect shall be alert and accurate in its action, and whose emotional nature shall be responsive to the beautiful things in the natural world and broad in its human sympathies?

Might the committee not have told us that should we find a school or a system of schools lacking in this aim as the result of all of its work, we could know of a certainty that it was not worthy of support? Might it not have told us that, if we found this aim determining all the formal plans of administration and instruction, and animating every act of the lives of the teachers and administrative officers, we could feel quite sure that the school or system was worthy of support altho in time it might be improved by a better agreement on standards of spelling and composition, etc., which would make these subjects of the course of study more effective in accomplishing their part of the whole aim?

J. M. Green, principal of State Normal School, Trenton, N.J.—We of our country are energetic and often very emotional. We are quite given to rushing new acquaintances, new ideas, and sometimes, I am afraid, new terms without much relating of ideas. It is easy to pick from the files of newspapers and magazines names of men upon whom

the eyes of the nation were focused, and whose praises were on every tongue for a brief season. How many of us could now readily recite the names of even the select few who have been chosen to the Hall of Fame?

Recall the favor in politics of such expressions as "taxation without representation," "the little log cabin," "Tippecanoe and Tyler too," "the full dinner pail," "the open door," "imperialism," "conservation," "progressive," and, in education, of such expressions as "object teaching," "co-ordination," "correlation," "concentration," "Herbartianism," etc.

There is a saving grace in our rushing. We are not likely to allow it to carry us clear off our feet, and our fads often leave a residuum of real and lasting value. Just now we are rushing the term *efficiency*. I do not know exactly what the term means. It is like some other expressions that we try to define—not by any specific language—but by talking much around and about them.

The proposition is that we establish, by action of the National Council of Education, a committee, board, or commission on school efficiency; that this committee be representative of the most significant scholarship and the best administrative practice known to our profession; that the duty of the committee shall be, first, to offer encouragement, expert advice, and opportunity for publication to those engaged in scientific work in the direction of the derivation of scales of measurement, in the application of such scales or units to actual school situations, or in the establishment in any other manner of standards in relation to public education; second, that it should offer expert advice with respect to the nature and scope of surveys, investigations, or inquiries to be undertaken in any part of the United States; third, that it should offer to members of our profession engaged in administrative work the opportunity to secure a scientific investigation of their systems of schools under the direction of professional experts.

For this committee the National Council is asked to make a liberal appropriation and prepare itself to make further endowment in order to make possible the increase in the efficiency of our system of public education and the establishment of our teaching profession.

Should the Council assume this undertaking? The answer should depend, first, on whether or not such a committee is desirable or even possible; second, on whether the Council or National Association has the money to meet the necessary outlay. Speaking to the first proposition, is there any distinction to be made between the use of standards in connection with material things and intellectual things? We may standardize bricks so that whenever we use the word "brick" we shall be understood to mean a solid four inches wide, two inches thick, and eight inches long. Can we standardize ideas in a similar way? Is it possible for us to select a given number of words and processes which in a certain schoolroom will produce a certain result that can be anticipated? Can we measure the value of an idea? Can we tell what the effect of an opinion will be on the community with which we are associated? Do thoughts take such forms in expression that they are the same to speaker and hearer? Does a given thought mean the same thing in one age that it means in another, or has it the same force in one place that it has in another? Was Galileo as much appreciated when he made his great declaration as he is now? Does Christianity mean the same thing in Turkey as it means in New England?

It has been said that there is no great school that does not bear the impress of some individual, that does not itself have an individuality. Can we compare the individualities of these institutions and state the results of the comparison in terms of exact measurement? How does Harvard compare with Yale, or Columbia, or Princeton, especially with reference to the last half of our century, and the problems it will offer?

The words "standard" and "standardize" have a place. We must be able to get each other's ideas and opinions as nearly as possible. To a certain extent we may adopt each other's views; for instance, as to the amount of light that should be admitted to a

schoolroom, and the direction from which it should come with reference to the position of the pupil; the amount of heat and of fresh air that should be admitted; the size and character of seats, desks, and blackboards. We may agree upon the approximate use we will make of a given number of words and signs; as, for instance, the alphabet, the names of the simple objects with which we are in contact—house, street, chair, and so on; the multiplication table, and the simple measurements called arithmetic. We cannot be absolute in the uses of any of these words or characters or processes, but we can be reasonably uniform in our estimate of their values and places. Beyond these simple processes it is quite impossible to go with any certainty that we are more nearly right than would be another. There is a very decided difference between popularity and permanent value.

I am strongly of the opinion that the tendency of our age is to minimize the teacher too much; to assume that by processes of a mechanical nature, supervision general and special, tests, etc., we can accomplish an education in which the teacher is a small part. I also feel strongly that this is the reverse of what it should be. The teacher is the most essential factor of education. Education is the influence of one mind upon another with a definite end in view. There is no exact way of estimating what that influence will be. How often we hear someone say of a certain teacher that he had more influence over him than any other teacher he ever had, that he practically was responsible for whatever success had come to him in life.

There should be a standardization, but it must be understood to be largely a standardization of opinion such as comes from a suggestive course of study. This is necessary for purposes of co-operation, classification, certification, etc., but it cannot be measured in exact terms of efficiency.

There are to my mind three strong reasons why the National Council of Education should not undertake the proposition:

First, the Council is not wise enough to select such a committee.

Second, there are no men wise enough to constitute such a committee.

Third, the National Education Association has not money enough to spare to meet the necessary expenses of such a committee.

There should be no objection to any superintendent of public instruction, any president of a college, or any board of education seeking any advice from anyone, but the National Council of Education should not designate that one.

J. M. Rice, formerly editor, *The Forum*, Mt. Vernon, N.Y.—To express my views on educational standards and tests of efficiency as briefly as possible, I shall state them in the form of two fundamental propositions, which, from my viewpoint, are of equal importance. They are:

1. That standards and tests of efficiency are capable of development on a scientific basis in education.

2. That such development has its limitations.

These two propositions will suffice to indicate that, in my opinion, we are here confronted by a problem that presents two elements, a knowable and an unknowable one. Now, if the new movement may be expected to be rewarded by the advent of a real science of education, it will be necessary for our educators to recognize that unless they confine their attention in the development of standards to those elements that are knowable, and for this reason are subject to standardization, the whole movement is liable to go awry.

Scientific standardization involves at least two distinct factors. In the first place, we must have a tangible or objective thing to be measured; and secondly, a tangible or objective thing to measure it with; the former being represented by the result, the latter by the test. Consequently, where the conditions are such that the result cannot be

expressed in terms of quantity, we can go only so far as to measure intangible things by means of subjective standards, and this lies outside of the category of science.

In education, science demands the standardization of the result as well as of the test. As for standardizing the result, the only possible basis is that of comparison, while the only possible basis of comparison is actual achievement. When this idea is carried to its ultimate conclusion, it will be found that the only scientific working basis is the capacity of the child. Thus, we cannot set up standards a priori. They can only be developed inductively by learning what the pupils in the more successful schools have been able to accomplish, while this can be known only within a sphere that will permit of actual quantitative measurement on a common basis. And, in my opinion, the nature of the problem is such that, from this point of view, our field is practically limited to the three R's. This statement requires an explanation into which, however, my time limit will not permit me to enter.

Again, from the viewpoint of standardization, the result cannot be accepted as it is, but must be viewed in the light of conditions, the fundamental one among these being the time allotment. Thus a result, even if found to meet the percentage standard, cannot be looked upon as satisfactory unless achieved within a given time. For example, if the standard result in arithmetic as determined by standard tests should be 70 per cent under forty minutes' daily instruction, 70 per cent achieved as a result of an hour's daily instruction would not be meeting the standard.

Now, when we come to touch upon the question of methods of teaching with a view to standardization, we find ourselves treading on very delicate ground. If an extended investigation should show that satisfactory results had been achieved in a given branch in a given percentage of the schools examined, and unsatisfactory results in others, and it should be found that the successful schools had used a method which the others had not, then a causal relation between methods and results could be said to exist, and we should perhaps be justified in accepting certain methods as standards. As it so happens, however, that during the course of my own investigations no such relationship was found to exist, I arrived at the conclusion that the question of methods was one in which we were not in a position to dogmatize without abandoning the scientific point of view.

In this respect, education differs entirely, for example, from the industries, where a given result at times cannot be obtained except thru the use of a certain machine or process. In education, we are thrown off the track for the reason that the mind is not a machine, but a highly complex organization, which will not permit us to verify the prediction that a given cause will lead to a given effect, except perhaps within a very narrow range. As I see it, we shall therefore adhere more closely to the scientific aspect of things by demanding standard results and allowing free play in the choice of methods to principals and teachers, than by demanding the use of certain methods to which the superintendents have taken a fancy, and granting immunity from results to principals and teachers who employ them and profess to believe in them.

For this reason, I maintain that the efficiency of teachers cannot be justly estimated by observing how they present their subjects, but can be so estimated only by noting what they have accomplished under certain conditions and with a given allotment of time, with this single proviso, namely, that the classroom spirit is such as to make the school homelike to the children. Thus, by insisting that the teachers accomplish the demanded results, but allowing them due latitude in the selection of methods, they will secure more actual freedom than when they are obliged to use certain methods, without being held accountable for the results.

In brief, then, I maintain that while it is well enough to theorize about methods from the standpoint of suggestiveness, we cannot, at least at the present stage of pedagogical knowledge, go so far as to dogmatize about them and look upon some of them as standards, even when indorsed by our leading educators, without abandoning the scientific point of view.

Again, in regard to the subject-matter of the curriculum, standardization does not seem possible except in the case of ideas and processes with which all persons of ordinary education are expected to be familiar, even after leaving school, whatever their walks in life may be. Within that sphere standardization is both desirable and possible; but beyond it much latitude should be allowed to principals and teachers. In arithmetic, the essential elements would be confined to addition, substraction, multiplication, and division of whole numbers, fractions, and decimals, besides percentage. Good penmanship, the use of good English, and the ability to read fluently are also self-evident requirements.

SECRETARY'S MINUTES

SALT LAKE CITY MEETING

OFFICERS

President—CHARLES H. KEYES, president of Skidmore School of Arts...Saratoga Springs, N.Y.
Vice-President—JAMES Y. JOYNER, state superintendent of public instruction.... Raleigh, N.C.
Secretary—ROBERT J. ALEY, president of the University of Maine.....Orono, Me.

FIRST SESSION—SATURDAY FORENOON, JULY 5, 1913

The National Council of Education was called to order at 9:30 A.M. in Barrett Hall, Salt Lake City, Utah, by President Charles H. Keyes.

The report of the Committee on Teachers' Salaries and Cost of Living was presented by the chairman of the committee, Joseph Swain, president of Swarthmore College, Swarthmore, Pa. The following took part in the discussion: David B. Johnson, president, Winthrop Normal and Industrial College, Rock Hill, S.C.; Carroll G. Pearse, superintendent of schools, Milwaukee, Wis.; James M. Greenwood, superintendent of schools, Kansas City, Mo.; Robert J. Aley, president, University of Maine, Orono, Me.; J. Stanley Brown, principal, Township High School, Joliet, Ill.; E. O. Holland, superintendent of schools, Louisville, Ky.; Mary Adkisson, Denver, Colo.; Amelia C. Fruchte, Central High School, St. Louis, Mo.; and Charles H. Keyes, president, Skidmore School of Arts, Saratoga Springs, N.Y.

SECOND SESSION—SATURDAY AFTERNOON, JULY 5, 1913

The meeting was called to order at 2:30 P.M.

President Keyes reported on the success of the "two meetings a year" plan, showing that the interest and attendance had been better than under the "one meeting a year" plan.

P. P. Claxton, commissioner of education, Washington, D.C., who was absent from the morning session, discussed the report made by President Swain.

James H. Baker, president, University of Colorado, Boulder, Colo., made the final report of the Committee on Economy of Time in Education. He recommended that the report be printed. It was voted that the report, with the chairman's recommendation, be referred to the Committee on Investigations and Appropriations.

THIRD SESSION—MONDAY FORENOON, JULY 7, 1913

The meeting was called to order at 9:30 A.M.

James Ferguson, principal of Polytechnic High School, San Francisco, Cal., read a paper discussing the report of the Committee on Teachers' Salaries and Cost of Living.

The report of the Joint Committee on Health Problems in Education was presented by Thomas D. Wood, M.D., professor of physical education, Columbia University, New York, N.Y., and chairman of the Committee of the National Council of Education, and R. W. Corwin, M.D., Pueblo, Colo., professor of surgery, University of Colorado, and chairman of the Committee of the American Medical Association.

This report was discussed by the following: Jacob A. Shawan, superintendent of schools, Columbus, Ohio; Henry B. Favill, M.D., Chicago, Ill.; A. E. Winship, editor, *Journal of Education*, Boston, Mass.; Helen C. Putnam, M.D., Providence, R.I.; W. A. Jessup, director, School of Education, State University of Iowa, Iowa City, Iowa; and others.

On motion of C. P. Cary, of Wisconsin, it was voted to continue the committee and to ask for an appropriation of $1,500 for the work of the committee.

The president appointed Joseph Swain, of Swarthmore, Pa., to take the place of A. S. Downing, of Albany, N.Y. (absent), upon the Committee on Membership. This committee was called to meet in Room 405, Hotel Utah, at 8:30 A.M., July 8.

The president appointed the following members to fill vacancies on the Committee on Investigations and Appropriations caused by absence:

A. E. Winship, Boston, Mass., to take the place of A. S. Downing, Albany, N.Y.
Jacob A. Shawan, Columbus, Ohio, to take the place of L. D. Harvey, Menomonie, Wis.
J. Y. Joyner, Raleigh, N.C., to take the place of J. H. Phillips, Birmingham, Ala.
J. S. Brown, Joliet, Ill., to take the place of Ella F. Young, Chicago, Ill.

FOURTH SESSION—THURSDAY FORENOON, JULY 10, 1913

The meeting was called to order at 9:00 A.M.

The following report of the Committee on Membership was unanimously adopted:

ROBERT J. ALEY, Orono, Me., *President*	Term expires 1916
WILLIAM B. OWEN, Chicago, Ill., *Secretary*	Term expires 1914
DAVID B. JOHNSON, Rock Hill, S.C., Executive Committee	Term expires 1916
A. C. NELSON, Salt Lake City, Utah, Committee on Membership	Term expires 1916
JACOB A. SHAWAN, Columbus, Ohio, Committee on Membership	Term expires 1916
A. S. DOWNING, Albany, N.Y., Committee on Investigations and Appropriations	Term expires 1916
T. A. MOTT, Seymour, Ind., Committee on Investigations and Appropriations	Term expires 1916
G. B. COOK, Little Rock, Ark., Committee on Investigations and Appropriations	Term expires 1916

MEMBERS

TERMS TO EXPIRE IN 1919

Fannie Fern Andrews, Boston, Mass., to succeed herself
Bettie A. Dutton, Cleveland, Ohio, to succeed herself
Charles H. Keyes, Saratoga Springs, N.Y., to succeed himself
J. F. Sims, Stevens Point, Wis., to succeed himself
Charles H. Judd, Chicago, Ill., to succeed himself
Bird T. Baldwin, Swarthmore, Pa., to succeed himself
A. Duncan Yocum, Philadelphia, Pa., to succeed himself
Josephine C. Preston, Olympia, Wash., to succeed Clem Hampton
Thomas C. Miller, Shepherdstown, W.Va., to succeed himself
Frank B. Dyer, Boston, Mass., to succeed himself

The meeting then adjourned.

ROBERT J. ALEY, *Secretary*

PAPERS AND DISCUSSIONS

STATEMENT OF THE WORK AND PROPOSALS OF THE COMMITTEE ON TEACHERS' SALARIES AND COST OF LIVING FOR 1912–13

JOSEPH SWAIN, PRESIDENT OF SWARTHMORE COLLEGE, SWARTHMORE, PA., CHAIRMAN

Commenting on the increase in wholesale prices that has been going on since 1897, the Committee on Teachers' Salaries and Cost of Living stated in Chicago a year ago that: "Authorities on the subject are of the opinion that the movement thus begun will continue indefinitely." Subsequent events confirm this forecast. According to a recent report of the Bureau of Labor,[1] wholesale prices, which had eased off slightly in 1911, reached a new high level during 1912. In the latter years they were 48.9 per cent higher than in 1897. On this basis the purchasing power of a dollar in 1912 was equal to the purchasing power of 67.2 cents only in 1897. Or, to put it in another way, to equal the purchasing power of a salary of $500.00 in 1897 would have required $744.50 in 1912.

Of course the increases of wholesale prices noted above have been reflected in retail markets. Another report issued by the Bureau of Labor on March 11, last,[2] enables us to trace this upward movement in the case of fifteen staple articles of food as sold over the counter to the ultimate consumer. On this score also last year marked the highest level for the last twenty-three years. In 1912, the average price at retail of the fifteen food commodities referred to above was 61.9 per cent higher than in 1896. During the last fifteen or sixteen years, therefore, wholesale prices generally have been rising at the rate of 3.26 per cent and the retail prices of food at the rate of 3.81 per cent a year.

WORK IN PROGRESS

It was suggested at Chicago that in the second task set for itself by the committee—a study of the actual salaries paid teachers of all ranks and in all parts of the country—the co-operation of other organizations, such as the national Bureau of Education, the Sage Foundation, or the Bureau of Municipal Research, might be secured. The committee deems itself very fortunate to be able to report that this anticipation was realized. At the present time a large investigation along the lines indicated is well under way in the capable hands of J. C. Boykin, of the editorial division of the Bureau of Education, who states its scope and purpose as follows:

> The investigation has been planned to cover the entire subject of the rewards of teaching. Naturally modifications will be made as the work progresses, for some of the

[1] *Bulletin Whole Number 114*, No. 1, April 4, 1913.

[2] *Bulletin Whole Number 113*, No. 5, p. 18.

features now contemplated may prove impracticable, and undoubtedly additional topics will be suggested from time to time. So far, however, the plans include the following:

1. An examination of the laws of the several states relating to teachers' salaries, including: (*a*) maximum and minimum salaries, with provisions for maintaining them; (*b*) authorities charged with the duties of fixing salaries; (*c*) taxation and other sources of funds for salaries; (*d*) use of state school funds, and restrictions that relate to salaries; (*e*) time and methods of payment, temporary loans, and other expedients to insure promptness; (*f*) conditions of payment, including certificates, attendance on institutes, etc.

2. Salaries actually paid to supervising officers and teachers in the city public schools.

3. The schedules under which those salaries are paid; the conditions of promotion, and of reappointment if appointments are for a definite term.

4. Salaries of teachers, etc., in villages and small cities.

5. Salaries in rural schools; house rent; gardens; provisions for boarding, etc.

6. Salaries of state, county, township, and district superintendents.

7. Salaries of teachers, etc., in normal schools and training classes.

8. Salaries of specialists in institutions, etc.

9. Earnings of private-school teachers (if obtainable).

10. Salaries of professors, instructors, etc., in state universities and agricultural colleges, etc., and in other higher institutions, as far as practicable.

11. Increase in salaries in certain typical cities (St. Louis, Boston, New Orleans, Baltimore, and Cincinnati) as shown by their schedules, from the establishment of their respective public-school systems to the present time.

12. Relation between subject and salary; between class of institution and salary; between geographical location and salary; between sex and salary, etc.; comprehensive comparisons; discussion; conclusions.

An authoritative answer to the question whether salaries have outrun or lagged behind the increase in the cost of living is of the highest importance. It will determine whether teachers have been able to maintain or extend an earlier standard of living or are being forced to lower economic levels. There remains, however, the further question whether the existing standard of living among teachers is satisfactory. Some very fruitful studies of this character have been made of certain laboring groups, and the committee is now conducting negotiations with an economist of distinction with a view to securing his assistance in this field. This will involve:

The formulation of a general plan which can be adopted by teachers in every locality in an attempt to determine whether or not the salaries which they are receiving provide a living. Considerable work along this line has been done with the budgets of wage-earners. In each such investigation a rather simple plan of procedure has been adopted, and the investigation has decided whether the wages paid in a given district enable the wage-earners there to maintain a standard of efficiency. It would seem that the same method might be beneficially applied in the case of teachers. The study for teachers should include, first, a statement of what teachers need to maintain a fair living; second, a statement showing the cost of filling such needs; and third, a comparison of salaries with these costs.

With the completion of the investigations detailed above, the committee should be in a position to formulate definitely a number of propositions regarding the salaries, tenures, and pensions of teachers. An extensive correspondence with this end in view has already been inaugurated among

the members of the committee, the results of which should be ready for presentation at the next meeting of the Association.

FUTURE WORK OF THE COMMITTEE

It is the hope of the committee that the various lines of work in progress, as detailed above, may be completed within the limits of the funds already appropriated for its purposes. There remains, however, one field of investigation which has been suggested for the future, and which is brought forward at this time in order that the members of the National Education Association may have an opportunity to decide whether they wish to encourage and support an undertaking of this magnitude and importance. The value of the studies made by Dr. Brooks of the social and economic conditions under which teachers live and work in Cincinnati, Denver, Hamilton, Atlanta, and New Haven is by no means limited to these communities. Similar conditions notoriously exist elsewhere. To what extent and in what localities they exist can be determined, however, only by a corresponding study of many widely scattered communities. A foundation has already been laid for such an investigation, should it command the favor of the Association, by the circulation last fall of a letter addressed to the superintendents of schools in all cities of over 25,000 inhabitants and to a select but widely distributed list of smaller cities. In this letter superintendents were asked to request teachers to keep such memoranda, particularly of their expenditures from September, 1912, to September, 1913, as would enable them to furnish the committee with the information it desired. If this plan is to be carried out it will require a large correspondence during the fall of the present year and following this the tabulation of the returns, and the writing of a report based upon them. [No funds are available for this work at present.]

PENSIONS

The third part of the committee's report is devoted to the subject of teachers' pensions. A conspectus which it contained made it possible to see at a glance the present status of pension systems in the various states and cities of the country. Following this the texts of existing pension acts were quoted at length in the hope that they might provide not only ideas but also legal phraseology in which to clothe them to groups of teachers engaged in the study of this subject. No attempt was made in our report to pass upon the merits of various pension plans. In a recent report of the Carnegie Foundation,[1] this subject is taken up as follows by Mr. Henry S. Pritchett, whose experience as president of the Foundation and whose exhaustive studies of pension systems of all descriptions at home and abroad qualify him to speak most authoritatively on this subject:

[1] Seventh Annual Report, 1912, pp. 70–74.

A FEASIBLE PENSION SYSTEM FOR PUBLIC SCHOOLS

This problem is now before the legislatures of many states. It is going to be an increasingly insistent question. In the presence of such suggested legislation, the thoughtful legislator will wish to ask at least four questions: (1) Upon what grounds are pensions for public-school teachers justified? (2) Assuming that pensions ought to be paid, who ought to pay them? (3) What form of pension system would it be fair to adopt, having regard both to the individual teacher and to the state? (4) What will such a pension system cost the individual teacher and what will it cost the state?

When these four questions have been answered, a feasible pension system for the public-school teachers of a state will have been described.

While it is not possible to answer these finally for a particular state without a thorogoing examination of the salaries, ages, and lengths of service of the teachers who compose the system, it is nevertheless possible to give a general answer, sufficient to guide the inquirer in forming a judgment.

1. Pensions are justified upon practically two grounds: first, those of a larger social justice; secondly, as a necessary condition to an efficient public-school system.

The first of these reasons applies in marked measure to pensions like that of the teacher. Society, as at present organized, desires to get the best service it can out of the various vocations and callings into which men are naturally distributed! In some of these callings great prizes are to be won and these serve as incentives for high performance. In other callings, like that of the teacher, there are no large prizes in the way of pecuniary reward and it would be a wise thing in society to create such. Society desires to obtain of the teacher a service quite out of proportion to the pay which he receives. Intelligence, devotion, high character—all are necessary, and the state seeks to obtain them at an average salary of $500 a year. It is clear that, if the state is to receive such service, some protection for old age and disability must be had, if the best men and women are to be induced to enter upon such a calling as a life-work.

Secondly, from the standpoint of efficiency in organization, whether a governmental one or a business one, there must be some means for retiring, decently and justly, worn-out servants. In the past we have in most cases turned out men and women no longer able to teach, but the conscience of our time does not permit such action. Outworn teachers remain to the direct injury of the pupils themselves. As a matter of efficiency, some humane method of retirement for public-school teachers is necessary.

These two reasons for the establishment of pensions for the teachers in state schools are sound and unanswerable.

2. Three plans for securing protection against disability and the weakness of old age are proposed: a pension system borne wholly by the

employer, a pension system borne wholly by the employee, a pension system conducted jointly by both employer and employee and supported by their joint contributions.

While there are some variations of opinion among those who have studied the question, the overwhelming weight of opinion is in favor of the third plan. I assume that on the whole it is fair for the teacher to bear half the cost of the annuity and the state the other half.

3. The form of pension system at once just and feasible would involve the consideration of many details, but at least these general principles may be assumed as proven:

a) The pension obligation should be compulsory upon every teacher who enters the service.

b) The amount of the contribution should be determined by thoro actuarial investigation, but each teacher shall form a unit, and the annuity which he is to receive shall be based upon his own payment plus that granted by the state. Such an arrangement is just and fair, and is capable of actuarial computation. Every individual, whether he survives, resigns, or dies, thus furnishes the basis for the action taken.

c) Contributions levied upon teachers who resign or are dismissed must be returned, with a moderate interest—say 3 per cent—and similar returns must be made to the widows or heirs of those who die.

d) A central administration for the pensions of all public-school teachers should be provided, constituted of a small commission serving without salary, with a paid executive who should at the same time be a competent actuary.

DISCUSSION

D. B. Johnson, president, Winthrop Normal and Industrial College, Rock Hill, S.C.—The National Education Association exists for the improvement of all the schools of the country and to that end for elevating the profession of teaching. I do not know of any way by which it could better accomplish the purposes of its existence than by helping to secure for teachers salaries sufficient to enable them to live in a way becoming the dignity and social position which should attach to their high calling and by lending its powerful aid to making the position of teaching more secure and to removing the chance of teachers spending their old age in dire want after having given the best of their lives for the welfare of the state at comparatively small salaries even at the best.

Good schools of any kind are secured only thru good teachers—teachers of ability and character—and we can have good teachers only by giving to the teachers' calling dignity, security, independence, proper financial and social rewards, and some certainty of support in old age, or in case of disability.

Governor Folk, of Missouri, in his address, "Education in a Democracy," before a conference for education in the South, well said: "Every state needs more schoolhouses, better equipment, better-paid teachers, and better teachers"; but he added: "No school is better than the teacher makes it, nor worse then the teacher permits it to become." The president of that same conference declared that "when this country realizes the dependence upon, and the obligation to, the teachers of America, the least appreciated of all who serve society and the state, then will appear the Golden Age. The teacher, not the millionaire, is the hope of the state."

I do not suppose that anyone will take serious exception to the position of our committee, that a profession or calling in which the incomes of its workers do not permit them to maintain the proper standards of living will deteriorate not only economically but also intellectually and socially.

We all know something of the dignity, independence, and influence of the German schoolmaster and of the honorable place he always holds in the life of his community. This is attributable more to tenure of office and to pensions than to high salaries. As the result of these conditions, Germany secures and holds as teachers for life able, intelligent, high-minded, and devoted men and women, and individual schools enjoy the continuous services for twenty and thirty years of men and women whose high qualities of character make them safe examples for the boys and girls placed in their charge. The example of the teacher plays a large part in the training of the children especially when he stays long enough in a community to become known and to exert that influence which every teacher should. "What we do speaks louder than what we say." *A Comparison of Public Education in Germany and in the United States*, by George Kerschensteiner, director of the schools of Munich, Bavaria, recently issued by the United States Bureau of Education, is well worth reading by any school man of this country.

C. G. Pearse, superintendent of schools, Milwaukee, Wis.—The discussion of the "Teacher's Working Day" rather effectually dispels the common notion that the teacher's hours of labor are "few and short." A most effective comparison has been made with those of bank clerks and officers; these employees of a business institution are not generally thought of as laboring too few hours, tho banks in cities open at 10:00 A.M. and close at 3:00 P.M., a period of five hours. The public knows that much of a bank's work must be done before doors open and after they close. This report makes equally clear that teachers have also many and heavy duties before and after school sessions.

It is to be remembered also that the work of the teacher is exhausting and nerve-testing; no other ordinary employment aside from that of the public speaker and the actor is so trying; and no one would think of keeping the actor or the public speaker "on the rack" for five to five and one-half hours each day, five days out of each seven, and nine or ten months out of the year. The school is the "audience,"—the "jury," and the teacher is the actor, the lecturer, the advocate. He must "hold" his audience; he cannot relax and let things drift; he must be at all times the real, if not the apparent, leader. It is not strange that nervous systems show exhaustion; that nervous breakdown comes, not only to women, but to men who follow this trade; that nervous dyspepsia and tempers and queernesses crop out.

PREPARATION FOR TEACHING

The report of the committee shows very clearly one thing: that the teachers coming into the work at present are much more thoroly trained for their work than was the case in the past. The superior preparation for teaching shown by teachers in the "under 25," "25 to 30," and "30 to 35" groups shows both that such preparation is being more and more insisted upon and that an increasing number of teachers can meet this demand.

EXPENDITURES OF TEACHERS

The report is most interesting in this respect: It is, I believe, the first showing of facts on the claim frequently made that the teacher's profession requires different and greater expenditures than is the case with persons in other employments giving equal income. The expenditures for clothing, books, and various items of professional culture or improvement are shown to be felt as necessary, tho burdensome, in great numbers of cases. These expenses are shown to bear most heavily in proportion upon those teachers whose incomes are smallest; there seems to be a certain standard of appearance and of social and professional activity required of all teachers. It appears particularly that, while with persons in most employments a larger percentage of income goes for clothing as income increases, showing that, in considerable degree, this expenditure is for ornament and is a luxury, with teachers the reverse is true, those with lowest income paying out more in proportion for clothing than those with larger income. The ordinary "working

clothes" of the teacher must be of an expensive sort—of the kind which people in many other lines of work are required to use only when "dressed up."

SALARIES OF TEACHERS WHEN COMPARED WITH THOSE OF OTHER PERSONS

The report gives figures to show that salaries of teachers, in a multitude of instances so great as to rouse the presumption that the condition is general, are smaller than those of persons in other skilled employments, as well as smaller than those of persons employed in other capacities by municipalities. This is not only true in figures showing income but, when the cost of preparation for the business of teaching is considered in comparison with the cost of preparation for these other lines of work, the disparity of compensation as against the business of teaching becomes even greater, a disparity which is turning away from the teacher's profession yearly an increasing number of the most capable and ambitious of those who might otherwise engage or continue in it.

ROBERT J. ALEY, president, University of Maine, Orono, Me.—The report as a whole is so complete and illuminating that one hesitates to attempt to add anything to it. The committee is to be congratulated upon the splendid and far-reaching result of the investigation.

The one phase of the report to which I care to call attention is the effect of wages and cost of living upon the personnel of the profession. The importance of education is certainly greater today than at any previous time. We are expecting great results, and we are spending much money to produce these results. It is true, however, as the late George P. Brown used to say, that "our schools will never be what they should be until they cost at least double what they are now costing." The taxpaying public needs to be brought into agreement with this far-reaching truth.

Those of us who are directly interested in educational work ought to double our efforts to spread information. We ought to enter on a campaign of education for adults along these lines. Comparatively few of the taxpayers of this country realize the direct relation between the cost of living, and the quality of men and women who can be induced to remain permanently in the profession. The profession of teaching, if it is to accomplish the result expected from it, must attract and hold the very best men and women that we can produce. It should have within its ranks the men and women who could make signal successes in other departments of public service. These men and women, in general, will not be attracted to the profession unless it promises larger returns, with the consequent comforts and opportunities, than are now guaranteed. The tenure of office and the salary paid therefore have a most direct relation to the quality of men and women who enter the profession, and also to the quality of those who make it a life-work.

It should be understood by all that the teacher ought to have a salary big enough to furnish money for travel, for attendance at state and national meetings, for the purchase of needed books and magazines, for contribution to benevolent and religious causes, and for maintenance of a style of living demanded by the position. All these things cost money, but every one of them has a direct relation to the efficiency of the service. The teacher, unable to meet these proper demands, is sure soon to drop below the standard that the present demands.

I have great faith that the people will do right once they are convinced what is right. The great need in the campaign for better wages is the diffusion of knowledge, the spread of the truth about conditions and needs. We should all become publicists and never grow weary in our advocacy of this great cause. When the public once understands, justice will be done and teaching will take its proper rank among the great professions.

J. STANLEY BROWN, principal, Township High School, Joliet, Ill.—The report of the Committee on Teachers' Salaries and Cost of Living is a significant document and ought to play a great part in bringing to the teaching body the inauguration of movements necessary to place the teacher where he belongs as a citizen.

This report will fall far short of doing its greatest service if its circulation is confined to the teaching body or even to the professional bodies. It is the public at large that needs to be informed about the teacher and needs to get the kind of information set forth in this report. If some way could be devised by which the contents of this report could be published in the daily newspapers of the country in a series of articles, the day laborers, who can by no other means get this information, would then have an opportunity to read what you and I have studied. The business men, who are not directly concerned, would then have an opportunity to read on the same page with other matter the results of this committee's investigations. The public at large has never had this information and will never get it except thru the channels which I have mentioned.

One part of this report clearly shows that the men who profit most are the men in the teaching profession who move from one position to another after a short period of service. In most cases these changes take place for purely commercial reasons, but anyone who examines the records of the men and women who have accomplished most in the teaching profession will soon learn that these accomplishments are due to the fact of long-continued service in one position, and to the fact that plans may be made for a series of years rather than from year to year. Continuity of service is one of the great necessities in the teaching profession if the teacher is to accomplish the greatest things in his work and if the teaching profession is to rank among the great professions of the world. We clearly recognize that the teacher is not paid for the character of service which he renders, but we must also concede that during the last ten years the salary of the teachers has materially increased and the position of the teachers is steadily growing in favor. There is no form of service which ranks higher than the service of a real teacher, and if this report can bring before the general public the facts which it sets forth in a convincing way, it will have done a service that has not yet been done by any committee of the National Education Association.

James Ferguson, principal of Polytechnic High School, San Francisco, Cal.—I wish to recommend to every member of the Association a most careful reading of the entire report of the Committee on Teachers' Salaries and Cost of Living. The data with regard to increased cost of living are presented in sufficiently concrete form to be of service; also the statements of demands upon teachers' time and energy.

Section 2 of Part 3 of the committee's report was prepared by William R. Hood, of the Bureau of Education, and deals with the question of teachers' pensions in the several states. It is valuable for reference as it contains an excellent tabular digest of state laws relating to teachers' pensions, as well as the full texts of the general teachers' pension laws in the United States.

Mr. Hood divides the teachers' pension laws of the United States into three types—non-contributory, compulsory-contributory, and voluntary-contributory.

Since this report was printed, California has passed a pension law which will be state-wide in its operation, in place of the old law which left the matter entirely in the hands of local authorities, and which was in operation in only one city in the state—San Francisco. The law was signed by Governor Johnson on the 16th of last month, only three weeks ago.

It is with satisfaction and yet not a little concern that many leading educators see this rapid growth of pension legislation—satisfaction, because of the principle of justice which it recognizes, and because of the benefits which may accrue to the service; concern, because much of it may prove ineffective.

President Pritchett, of the Carnegie Foundation for the Advancement of Teaching, in the seventh annual report of the president, a part of which has already been presented to this Council, makes the most critical, scientific analysis that I have seen of this pension movement in the United States.

He says:

The difficulty of maintaining a pension system from an estimated income is very serious. Even with the best actuarial study, the conditions of the future are difficult to forecast. All groups for which pensions are available show a curious liability to grow in size. The death-rates fail to follow the anticipated law. Any pension system administered from a fixed income and unprovided with a source from which its income may be increased is bound in time to come to a point where the calls upon it under its own rules exceed its income.

California's past experience in teachers' pension legislation bears out the statements made by President Pritchett.

In conclusion, I wish to recommend to those interested in the question of teachers' pensions a most careful reading of the seventh annual report of the president of the Carnegie Foundation. If the principles laid down by him are followed, much disappointment will be saved the friends of this movement.

REPORT OF THE JOINT COMMITTEE ON HEALTH PROBLEMS IN EDUCATION

I. THOMAS D. WOOD, M.D., PROFESSOR OF PHYSICAL EDUCATION, COLUMBIA UNIVERSITY, NEW YORK, N.Y., AND CHAIRMAN OF THE COMMITTEE OF THE NATIONAL COUNCIL OF EDUCATION

The first part of the report as presented by Dr. Wood at this time duplicated the report which was given by him at the Philadelphia meeting of the Council, which report is printed with the papers of that meeting. We print here only additions thereto.

Among the reasons which explain the present deplorable conditions of rural schoolhouses, the following are prominent:

a) Low architectural and sanitary standards in rural regions generally thruout the country.

b) Ignorance regarding the physical and moral effects of unattractive and unsanitary school buildings upon the children and upon the community as a whole.

c) False economy expressed by local school boards in failure to vote enough money to build and maintain suitable school plants.

d) Lack of supervision or assistance by the state which is usually necessary to maintain desirable standards.

Some important influences which are effective for securing and preserving the sanitary with other valuable features of rural schools are suggested.

a) The furnishing, by the government Bureau of Education and by state departments, of plans and instructions for construction and equipment of rural-school buildings.

The Bureau of Education in Washington is already supplying on request valuable help of this kind, and a few state departments are demonstrating what may be done by supervision and support which aids without restricting.

b) Supervision of rural schools by state departments of education with power:

(1) To condemn unsanitary and wholly unsuitable buildings.

(2) To give state aid to rural schools when the local authorities fulfill certain desirable and reasonable conditions.

c) The inculcation of ideas and standards of school sanitation in minds of local school patrons and school authorities who control school funds and who administer the affairs of the schools. Public lectures in the schoolhouse on health topics.

d) The introduction of effective school health courses in normal schools and teachers' institutes.

The better education of rural-school teachers, county superintendents, and rural-school supervisors in the principles and practice of school hygiene and sanitation.

e) The instillation in rural-school pupils of interest in, and enthusiasm for, the improvement and care of all features in the school and surroundings which affect health and happiness.

The development among pupils of organizations like "pupils' boards of health," "civic leagues," or "health militias" for actual constructive effort.

f) Co-operation with the rural school of organizations like the "granges," "women's clubs," "county medical societies," and other groups so situated that they may further the cause of health and efficiency in the school.

g) Popular education by attractive but reliable health information in the public press.

h) The introduction of social demonstration of rural health standards and improvements by volunteer or employed demonstrators.

The Health Committee of the National Council with the co-operation of the Committee of the American Medical Association is making a study of the actual conditions of sanitation in rural schools in different parts of the country as a basis for an authoritative report upon this subject which shall:

a) State the health conditions of country schools as they actually exist at present.

b) Explain very clearly by illustrations and descriptions the different types of sanitary schoolhouses and sanitary equipments which are most desirable and most suitable for the varying conditions in different parts of the country.

c) Outline convincingly the various influences within and outside of the rural community which may be effective in bringing about marked improvement in all the conditions in the rural school which affect health.

The report of the Joint Health Committees will be embodied in a special bulletin on *Country Schoolhouses* to be issued at an early date by the United States Bureau of Education. This bulletin is being prepared by Dr.

Fletcher B. Dresslar, a member of the Health Committee of the National Council, with the co-operation of the two committees referred to above. Dr. Dresslar has collected statistics from school authorities concerning over 1,300 schools in 19 different states. The two health committees have employed a field secretary who has personally studied with detailed care and photographed one hundred rural schools in five states.

The purpose of the report is to provide for every person, who desires such help, the best available information regarding the construction, equipment, and maintenance of attractive, healthful, and inspiring rural schoolhouses, and the improvement of existing unsanitary conditions in the schools.

II. R. W. CORWIN, M.D., PUEBLO, COLO., PROFESSOR OF SURGERY, UNIVERSITY OF COLORADO, AND CHAIRMAN OF THE COMMITTEE OF THE AMERICAN MEDICAL ASSOCIATION

Dr. Murphy, at the meeting of the American Medical Association, held at Los Angeles, June, 1911, in his presidential address, laid great stress upon educating the people in the basic principles of health.

He suggested the establishment of lay health journals; complimented the teachers on their earnest and excellent instruction in health sciences, and recommended that the American Medical Association appoint a committee to bear thanks to the National Education Association, which was to convene in San Francisco two weeks later, and tender them the services of the American Medical Association in developing the great undertaking of improving the health conditions thru the schools.

The committee appointed by the American Medical Association met the representatives of the National Education Association in San Francisco and were heartily received by the president of your Council and the President of the Association.

This is not the time for details. Suffice it to say, a committee from each body was appointed to study jointly the health problems pertaining to the public schools; money was appropriated by both associations, and at St. Louis, Chicago, New York, and Washington, many meetings have been held by the committees.

It was decided to begin with investigations of the rural school. The gravity of the findings of the committees needs no comment. You may judge from the report read by Dr. Wood whether you are satisfied with conditions of the rural school.

Could you have imagined that any part of our country contained and upheld schools "violating most or all the principles of sanitation and whose existence or use is a disgrace to any civilized community," that not a few but a majority of the rural schoolhouses are unfit for use because of insanitation, and that in many sections of the country the average rural schoolhouse in relation to its purpose is not as well kept or as healthful

as a good stable, dairy barn, pigpen, or chicken-house? But what more could be expected from a government that creates a cabinet department for animals but fails to recognize one for man; that appropriates millions for brute heredity and little or nothing for human eugenics?

It is bad enough to know that 15,000,000 out of the 20,000,000 school children in the United States are diseased and unhealthy; that 300,000 persons are socially unfit; that 200,000 venereally infected people walk the streets of New York City daily (New York is no exception to other cities large or small); that 5,000,000 people in the United States are suffering from syphilis; that our country permits several million prostitutes to promote their business; that venereal diseases cause one-eighth of all human suffering; that 80 per cent of deaths due to inflammatory diseases peculiar to women are caused by gonorrhea; that a cesspool of degradation in the Pine Lands of New Jersey, as revealed by Dr. Goddard and Miss Kite and reported in the Kallikak family and "Mag," exists under the shades of Princeton, and that similar conditions exist in other states; that we punish the drinker instead of the seller; that we criticize the use of cigarettes and permit their manufacture; that it costs $32,000,000 per year to care for patients suffering from mental diseases in public institutions; that insanity is increasing more than twice as rapidly as our population (11 and 25); that heart-disease is 57 per cent more prevalent than fifty years ago; and that kidney diseases have increased 131 per cent in the last half-century.

All this is bad—bad enough—but to think that we should permit the existence of schools that are health-destroying and moral-corrupting, and teach by illustration the vilest of sanitation, as reported by the chairman of your committee, is well-nigh incomprehensible.

Does the report read this morning give assurance that the doctors, the teachers, or the laity have been performing their duty?

With improvement of the rural schoolhouses, the duties of your committee do not end. In fact, they are just begun, and it is sincerely hoped that your committee may be permitted to pursue a course that has been well planned.

There are many disgraceful things that have been tolerated and indifferently permitted that demand attention and correction: In our schools we find 2 per cent of children known to be feeble-minded; in some schools, they average as high as 30 per cent—and this does not include the morons, the higher class of defectives: those who run away with the chauffeur, who supply the courts with divorce cases, feed the prisons, and necessitate the employment of detectives; it is well known that the feeble-minded constitute the major portion of criminals, prostitutes, epileptics, drunkards, neurotics, paupers, and ne'er-do-wells, found in and out of prisons; and that in a large number of our states the mentally defective are cared for when young but when reaching maturity and most dangerous are turned

loose upon the community to become parents of a class, with each generation becoming more depraved.

If for the next hundred years our schools would discontinue all higher and æsthetic education and devote their energy to improving the human stock; to feeding and breeding; to teaching that acquired traits die with the body, that inherited traits pass to the next generation, and that the laws of heredity are constant and are the same for bug and man; to developing athletically the weak pupil instead of the strong, making the average improvement of health in school a prize-winning contest instead of the fastest mile or highest jump; to insisting that every normal school and teachers' college should give thoro instruction in health sciences and every teacher be obliged to pass a rigid examination in these sciences before being qualified to teach in a public school; and to educating the people to know that environment is important but heredity more important, and eugenics most important, and that thru eugenics is the only hope of improving our race or saving our nation—if this were done, at the end of the century we should find the people not only 100 years older but 100 per cent better, stronger, and wiser.

We do not ask, however, that higher education be discontinued, but we do earnestly request that more time be devoted to the fundamentals of education, that is, to health sciences.

DISCUSSION

Henry Baird Favill, M.D., Chicago, Ill.—In considering hygiene, rural or urban, we are prone to forget the simplicity of its principles in an endeavor to meet the complexities of its application. One law underlies the hygiene of all life, and it is as infallible and fundamental and determining for plants and animals as for human beings.

The processes of life depend upon adequate appropriation of food and innocuous disposal of waste. These terms are to be interpreted broadly, to cover air and water, but with this inclusion the principle is complete. Two subprinciples are universal: (1) regard for the interests of coexisting life, be they reciprocal or antagonistic; (2) adaptation to conditions of physical environment. Out of interaction of these principles must be evolved all hygienic and sanitary law. Waiving for the moment questions of access to food and mutual protection, the problem of individual safety from a hygienic standpoint is difficult in direct ratio to the multiplication, which involves proximity, of other individuals. Community life, evolved primarily as a measure of safety and economic facility, becomes rapidly and effectively a menace to its individual components. With every refinement of civilization has come deeper disturbance of primitive law of supply and demand. It is more than a jest—the recipe for rabbit pie. One might starve, but he never would be overfed if he had first to catch his hare. It is just as certain that those would starve or freeze or be devoured who are unable to provide for themselves; and this is nature's inexorable law. We have substituted for natural selection social devices, and we are slowly coming to realize the penalties involved, and to feel an obligation to meet the exigencies. For the checks and balances of limited food and shelter, and instinctive guidance in their use, we have substituted relative ease and plenty, and adopted an imitative method which results in custom and habit.

There is but one method worthy of acceptance in social development: to prove all things. In the proving it becomes obvious that development of custom has followed lines

dependent on the possession of material resources in part, and only in part heeding the principle of appropriate use of food and adequate disposal of waste.

Let us pause to reflect that waste is not only the obvious matter of excreta, in which the community is especially interested as against the individual, but it is also the fine chemical question of cellular waste and its disposal in which the individual is interested as against himself. It is doubtless in respect to this proper balance in bodily processes, which one may venture to call physiologic cleanliness, that the most profound hygienic laws may in the end be determined.

The question for us is: Do we care to adopt extraordinary means to protect ourselves, or shall we let nature operate unmodified? Thus far we have seen fit to modify the operations of nature widely. Why not in this most vital struggle? The logic of this is too plain to justify argument, and yet we are, as public-spirited citizens, in the throes of a struggle to institute and maintain simple precautions against the dangers of community life.

It is true that the measures suggested have not always been wise, and that opposition to a plan has often submerged a principle. It is true that conception of the principle has been defective, and methods, by reason of their provisional character and tentative scope, have not reached the root of matters. Nevertheless, there is but one ground upon which civilized people can stand: the paramount necessity and obligation to provide conditions for all which are wholesome and which permit the observance of hygienic law. I ask you to observe the statement: wholesome conditions that will permit hygienic living. Wholesome conditions demand sanitary law; hygienic living demands intelligent habit. Sanitary law without personal hygiene is vastly limited in its beneficence. Correct habit in unsanitary conditions is more or less futile.

Both lines of this development must be advanced. Unfortunately, they do not, as a rule, proceed *pari passu*. Sanitary law involves but the intelligent action of legislators. It is prompt and effective. Hygienic living, on the other hand, involves substitution of habits for other habits—in the mass, a colossal undertaking. Logically, one might believe that when a people, by and large, had correct ideals and corresponding habits of life, sanitary law would be unnecessary, or easy and inevitable of achievement. Doubtless this is true, but need we postpone for an event almost millennial the benefits of common observances which never will be superfluous, and which protect a large portion of the territory we are striving to redeem?

In comparison with the problems presented by city conditions, rural sanitation has few inherent difficulties. From the standpoint of public administration a coefficient of difficulty could be adduced for all communities based on the number of inhabitants per acre. Upon this basis country sanitation becomes simple, tho not so trifling in view of the fact that animals must be included in this calculation.

Why, then, is sanitary progress in rural districts not markedly in advance of other communities? Admittedly it is not. In many directions it is far behind. Two facts in explanation of this are pertinent: the simplicity of a problem bears no relation to its early solution; however, rural advance is unduly tardy. Moreover, the deepest reforms arise out of conditions the most aggravated. The country has not these. The natural evolution of sanitary standards is here not to be trusted. For this reason specifically and intensely directed attention is indispensable in most districts.

When one affirms the simplicity of country sanitation from the general administrative side, or the possible habitation side, he must not ignore certain specific difficulties that are on the social and industrial side. Isolation implies relative safety from contagion, both to the individual and to the community; but it carries with it complex industrial function and freedom from scrutiny. These two factors are of paramount importance in the present status. Let us illustrate. The farmer has a small dairy. He and his wife and children milk as a regular duty. A case of typhoid fever occurs in the house. The wife is nurse and milker. The father is milker and distributor of milk in some fashion. The

children are variously either. Compared to the process of walling off a case of typhoid in the city, consider the complexity of this farm situation. The patient must be nursed; there is no one but the mother to do it. The cows must be milked—she must do her share. The milk must be disposed of—shall it be thrown away? There's the rub. With no one to know what goes on, why waste it? Or, if thrown away, what a relatively deep inroad into the family income. All the work to do, all the expense, and no return. Is it any wonder that farmers are not looking for sanitary restriction? Yet this is inherent in the complex function of a farmer's life.

This is no reason why the question should not be met and dealt with thoroly. But it is one of many illustrations which should lead to the conclusion that rural sanitation should not be directed from the viewpoint of the city, but by careful study and provision for its specific necessities. Supervisory control of sparsely settled districts is not feasible. By as much as the individual is a relatively free agent, by so much is his reliability dependent on his integrity of purpose. The very conditions that make rural sanitation feasible determine the lines upon which it must go. Here the emphasis must be placed upon individual responsibility. By no other idea can it adequately be met. This does not mean that the principle is different in the two cases. It does mean that relatively perfect sanitation is possible in the country.

While I have no reservation as to the importance of developing sanitary law with all speed and force and wisdom, I am firmly of the opinion that it offers but a partial solution. The most that it can do is to remove untoward conditions. The essence of the matter is personal hygiene and its underlying ideals. In this regard the most favored class is not materially in advance of the less favored. The essentials of personal hygiene are few and simple, but by no means easy of attainment, for there is involved that most difficult factor, self-discipline. It is absurd to seek the possession of health in sanitary enactments. It is not a matter of law, but of character. On the surface, this is not very obvious. Life is so automatic, specific resistance and vigor differ so widely in different individuals, and especially, cause and effect are so far separated in time, that this picture is of necessity obscure. Nevertheless, I am convinced that any individual can materially enhance his health and increase his resistance to external attack by judicious living. If that be true it follows that education and character are the corner-stone and keystone of the structure.

Assuming this, how does it bear markedly on rural conditions? In principle, not more than in all environments; in practice, in promise, in possibilities, it is of immediate significance. Self-respect and freedom are the birthright of the farmer. They are also the basis of character. In so far as they fail of full development a blight is upon the harvest.

Is it a far cry from the fundamentals of farm life and its psychology to health ideals? I hope so. I have no faith in remedies less searching and remote. Let me be not diverted from my philosophy by obvious disconnection and apparent indirection. Do you recall the wisdom of the men called upon to administer the Rockefeller fund for the improvement of education in the South? Do you recall that they discovered that what was the matter was lack of productiveness of the land, hence lack of money, hence lack of independence? Did they begin by supplying money for schools? You recall that they began by educating the planters in the art of agriculture, confident that schools would follow that uplift. So here the psychology of rural life is what we need to study. Upon it turns the entire hygienic and economic future.

Farm life is not a bed of roses, but its advantages and compensations are far from being appreciated by those engaged in it. Drudgery and routine and monotony are there, but not to compare with most city occupations. Mental isolation is there, an incubus more than offsetting the advantage of physical separation. It is this that breeds conservatism, upon which the state has counted for a large measure of its stability; but it leads, too, to ultra-conservatism over which we stumble in social advance. Small margin

of profits is there, leading in the best type to frugality, and in the worst type to shiftlessness. Desire and prospect of property are there, leading to a jealous hostility to imposed expense that may defer economic independence. Inertia is the result, a static factor to be overcome from within, and but indirectly from without.

A deeper consciousness in the farmer of his relation to life is the desideratum. Not only are the dignity and importance of his function, as the producer of the world's sustenance, important for him to realize. A larger lesson of self-assertion and a comprehensive view of his commercial relation are essential to his full sense of freedom. Out of this will grow his clearer view of adaptation of means to ends; proper utilization of resources; economy of effort; and truly ethical conservation. Pursued to their end, they would evoke nothing but self-esteem. Self-respect involves a deeper note. It demands civic consciousness, a sense of community responsibility, participating, not selfish life. That motive is beneath all great accomplishment. It is simple and vital.

But, it may be commented, the physical and industrial conditions are unfavorable to community life. The farmer has scant time for social intercourse. Granted; but he has time to establish his mental attitude and determine his own standards, and this is far and away the greatest contribution to the common weal that men make. It is the very gist of the country-life question and may as well be proclaimed. In many respects there is not as much community life in the country as there was years ago. It is not safe to generalize too broadly on matters so complex. Yet I venture to make this comment: women on the farm have not the interest in the intrinsic features of the industry that is necessary for their contentment or their fullest development. Agriculture has gone in long strides in interest and effectiveness. Men have kept pace variously. Boys have grasped it eagerly. Woman's work on the farm, arduous as it is, is not as burdensome as it used to be. Has she lightened her load by the stimulus that comes of real interest in and comprehension of the vocation of which she is an indispensable part? My observation is that she has not.

The trouble lies in education. Neither to boys nor to girls is education offered of a character to adjust the matter. Once more I am conscious of the danger in generalizations. I have, however, but to point to the interest and enthusiasm created by signal departures in agricultural pedagogy to justify my statement. It is not likely that rural education is better or worse than much city schooling. The criticism is almost universal that we do not, in our educating, fit for life. Our problem, however, is the rural school. Being less developed and crystallized, it is probably easier of correction. I have no idea that simply adapting the course of instruction to practical agricultural subjects will solve the difficulty. Important as it is—and I regard it as an indispensable factor in the process—it will at best furnish information. The perfection with which this is done will make the determining steps more certain and valuable, but the determining step will none the less be needed.

And what is this step in which I seem to have such confidence? Socialization of the school: an inadequate phrase, perhaps, but a text. Cities and towns have many social devices, the country few. We are saying a great deal of late about giving the young people in the country more social latitude. They need it, but our suggestions easily become forced and artificial and in so far doomed to fail. The school is a natural center, organized, financed, and recognized. It can be made the clearing-house for the community intelligence—not for men or women or children, but for all; the place where youthful eagerness can meet and interact and in turn react upon the mature powers of the neighborhood; the place where information can be transformed and vitalized into knowledge, to the end that impression may become conviction. Only so can we mitigate the waste of time and expense and life that is inherent in our present methods. All the precept in the world, even if followed, is not effective until life has ground it into our fiber. Need we always expend the most of life before we have fully incorporated our opinions? Is there not a better social organization to be conceived that will avoid this waste? Once more we

fall back upon our school system to save the situation. There is no other place to look.

Once more we are face to face with the weakness of our machinery. Is it sound to look to the school system for relief? At present, no—as an ultimate achievement, yes. If in a generation that can come to pass it will be a triumph. Administrative function most readily follows demonstration.

The need of the country is *leaders*—men and women with ideals and imagination. They are there in abundance, undeveloped, unheard, wasted. Technical agriculture hoped for its uplift from the agricultural college. In a measure it found it. But it has its limitations. Now comes into the field the expert demonstrator under public or corporate auspices. It is a great step forward. It has in it the magic factor of leadership. Why shall we not interpolate between our present inefficiency and our ideal educational standard a period of social demonstration? This is not a dream. Social demonstrations here and there, under average conditions, are conclusive as to possibilities. The factor needed is conception and plan. Ways and means can be developed. Of all the fields before us the country is most inviting.

DEPARTMENT OF KINDERGARTEN EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—Mary B. Page, director, Chicago Kindergarten Institute ..... Chicago, Ill.
Vice-President—Grace Fulmer, supervisor of kindergartens ..... Los Angeles, Cal.
Secretary—Mary B. Fox, Kindergarten Department, University of Utah, Salt Lake City, Utah

FIRST SESSION—Monday Forenoon, July 7, 1913

The meeting was held in the First Church of Christ, Scientist, and was called to order at 9:30 A.M. by the president of the department, Mary B. Page, director, Chicago Kindergarten Institute, Chicago, Ill.

Mrs. Page introduced the first speaker, P. P. Claxton, United States commissioner of education, Washington, D.C., who gave a talk on "Why Should the Kindergarten Be Incorporated as an Integral Part of the Public-School System?"

Barbara Greenwood, Los Angeles State Normal School, Los Angeles, Cal., followed, with a talk on "Ways and Means of Increasing Effective Kindergarten Supervision."

Patty S. Hill, head of Kindergarten Department, Teachers College, Columbia University, New York, N.Y., was unable to be present. Her paper was read by the president. It was entitled "Some Obstacles in the Path of the Kindergarten of the Future."

The nominating committee was appointed as follows:

Mary B. Fox, Salt Lake City, Utah.
Rose Jones, Brigham, Utah.
Lucy T. Little, Phoenix, Ariz.

The meeting then adjourned.

SECOND SESSION—Wednesday Afternoon, July 9, 1913

The meeting was called to order in the First Church of Christ, Scientist, at 2:30 P.M., by the president.

The Committee on Nominations submitted the following report:

For *President*—Katharine Tracy, Ethical Culture School, New York, N.Y.
For *Vice-President*—Lucy T. Ellis, principal of Phoenix Kindergarten, Phoenix, Ariz.

The committee recommended that the secretary of the Kindergarten Department be appointed by the president from the town in which the meeting is held.

The report was unanimously accepted.

A paper on "The Value of Outdoor Kindergartens" was read by Ada Mae Brooks, president, Broadoaks School, Pasadena, Cal.

The main question under discussion was "The Effect of the Scientific Spirit in Education upon the Kindergarten," which was presented under the following subheads: "In Relation to Materials," Louise M. Alder, State Normal School, Emporia, Kans.; "In Relation to the Distinctive Characteristics of the Montessori Method," Elisabeth R. Shaw, Child-Study Department, Public Schools, Evanston, Ill.

The meeting then adjourned.

THIRD SESSION—Thursday Forenoon, July 10, 1913

The third session of the department was held in connection with the Department of Elementary Education in the Tabernacle.

Mary B. Fox, *Secretary*

PAPERS AND DISCUSSIONS

WHY SHOULD THE KINDERGARTEN BE INCORPORATED AS AN INTEGRAL PART OF THE PUBLIC-SCHOOL SYSTEM?

P. P. CLAXTON, UNITED STATES COMMISSIONER OF EDUCATION, WASHINGTON, D.C.

[*Abstract*]

It is a well-known fact that all organized bodies are conservative, that to introduce a new feature it is necessary that the idea be completely worked thru a series of evolutions, beginning with specialists on the subject. Froebel was the great discoverer of infancy as a phase of life worth considering, as the beginning of the moral, æsthetic, and educational tastes of life. He was the pioneer specialist in kindergarten work and his life was spent in trying to convince the German nation of one fact, that early childhood is an important period in the formation of tendencies or the creation of attitudes in life. He died without seeing any tangible results, but since 1836 he has been the authority which modern thought has followed. The gradual growth of his ideas, the try-out of his plans by organizing kindergartens in the slums among the poor and uneducated class, has taken over half a century.

The kindergarten, like every other new movement, has had to be fostered by individuals and associations especially interested. Organized institutions do not undertake new interests. Ideas must first be worked out and their practical worth proven before they are adopted by public institutions.

Upon the answers to three questions must depend the answer to the question whether the kindergarten should now be adopted as an integral part of the public-school systems of states and cities:

1. Is all education a function of the state?

2. Should there be formal education provided for children before the age of six?

3. Is the kindergarten program an effective one?

My answer to each of these is in the affirmative, and therefore do I believe that the kindergarten should be adopted as an integral part of our system of education.

When this is done, great care will be necessary to prevent the kindergarten work becoming over-formal and losing its most essential characteristics. To prevent this there must be no attempt to grade children on their attainments or take out definite and fixed courses of study, nor must we suppose that because the children are small, teachers do not need a high degree of education. Women of the best education and training must be selected for teachers of the kindergarten classes. Personality counts more here than anywhere else.

Another reason for the adoption of the kindergarten as a part of the public-school system is the effect which it will no doubt have on the work of the primary and grammar grades and even on the high-school grades.

WAYS AND MEANS OF INCREASING EFFECTIVE KINDERGARTEN SUPERVISION

BARBARA GREENWOOD, STATE NORMAL SCHOOL, LOS ANGELES, CAL.

The following suggestions under this topic are based upon some practical experience and much observation. To more readily present the subject I have divided it into three parts: (1) What is the necessity for special kindergarten supervision? (2) some of the dangers of supervision; (3) ways and means of increasing effective supervision.

First, What is the necessity for special kindergarten supervision?

The kindergarten is a peculiarly special work. Because it is truly understood only by those who have had special training, greater importance must attach to its direction. The kindergarten period and the years preceding it are the most important in the development of the human being, not even excepting the very important period of adolescence. That "the child is father to the man" all modern psychology proves. Since this is true we cannot lay too much emphasis upon the right control of the department dealing with this age.

Another urgent need for supervision is to bring about complete unification. Whereas we desire that great freedom be exercised in kindergarten work, there must be co-operation to solve the problems confronting us.

Again, we know there is unusual opportunity for haphazard work in the kindergarten because of the latitude allowed by its less restricted curriculum. Much that is really poor, or at best indifferent, is accepted by an unsuspecting, tho slightly puzzled, outside world, with "Well, I suppose that is kindergarten." It is within the province of supervision wisely to curb the extravagant, the radical, the careless; to protect the child from temperament, experiment, and all that is unworthy.

Another reason for supervision is that there may be some medium of information for the kindergarten department, the superintendent, and the board of education; someone to present the manifold problems and needs. This can be done systematically and effectively only by one vested with authority. She should help in the appointment of the teachers, since only the supervisor can adequately determine the qualities particularly needed, and she should be held responsible for the personnel of her department.

Then, again, the business and financial problems alone are sufficient reason for supervision. In the matter of ordinary supplies, for instance, we find inexperienced teachers at a great disadvantage. This is a standing objection to kindergartens, not because of what the expenses in reality are,

or should be, but because of the exaggerated ideas of the untrained. There is certainly evidence of this fact in the recently printed kindergarten report of the Committee of Investigation. In this report, the opinions in regard to the expense of the first equipment vary from $10 to $500. In this same report opinions in regard to consumable material vary from $25 to $200. Those who have had experience realize that the matter of expense need never be an objection to the kindergarten when properly managed.

Having indicated some of the conditions that make kindergarten work more effective thru supervision, we will consider the second division of the topic: Dangers of supervision.

In general, where supervision exists, teachers are likely to be too much supervised. Their individuality and personality are not developed; they are hampered in their plans rather than encouraged to grow by working out their own problems in their own way. Or, again, teachers are sometimes prone to depend too much on the leader, shirking the responsibility of initiative. Or perhaps the supervisor plans the work too minutely, thus destroying all opportunity for originality or freedom of thought. Rather, the plans or subject-matter should extend over large periods of time; they should be very general indeed, with ample possibility for substitution and elimination in accordance with the differing conditions of the schools. All plans should be more suggestive than restrictive. A prejudice has justly arisen in some school systems where kindergartens are supervised by a primary expert. However efficient, no teacher can successfully superimpose the methods and ideas of the present-day primary upon the kindergarten, as she inevitably will do, if approaching the situation from the viewpoint of the primary grade. If, on the other hand, she recognizes that the ideals of the kindergarten must permeate the grades, she may combine the two most successfully.

I come now to the third division of the subject: Ways and means of increasing effective kindergarten supervision.

In the first place we may ask: What *is* effective supervision? In a general way, we answer that effective supervision is the working-together of supervisor and teachers having for its aim the best good of all. Now the first, last, and only means of accomplishing this is to have the right kind of a supervisor: one who is purposeful; capable of intelligent, sympathetic, conservative leadership. She must possess professional skill balanced with much common-sense. Moreover, she must not only understand thoroly her own specific work, but she must also have much knowledge of the whole educational system in order to see the relation of this foundation work of the kindergarten to the whole.

Given, then, the supervisor who realizes truly that "where there is no vision the people perish," what is the next important condition to be fulfilled for effective supervision?

Here I have to state a truth as old as the organization of our educational

principles into a working system, the truth that the teacher is of supreme importance. Nowhere is it so true as in the kindergarten that the teacher makes the school. Dr. McMurray has said: "Whereas personality is important everywhere, in the kindergarten it is a necessity." Effective supervision calls for a corps of teachers, then, in whom the majority, at least, are strong personalities, willing to be directed, eager to go forward, disciplined to abide by the best interests of the whole body.

Being a thoro student of psychology, child study, and pedagogy, the supervisor will understand the significance of the words, "And a little child shall lead them." She will so guide her teaching force that they, too, will constantly realize what a wonderful privilege it is truly to know a little child. With this high conception of the teacher's work the supervisor can weld together the members of the working group into a forceful whole.

The greatest service, as I see it, that a supervisor can render her teachers is to be a constant source of inspiration to them: to be able always to call forth their best and to create a faith in themselves that they are capable of a noble best. It is necessary that the supervisor so wisely direct her department that the teachers will ever understand that she considers it a privilege, as well as a duty, to appreciate, to encourage in every phase of the work; above all, to help them attain freedom, the freedom which is essential to growth.

Another very important work is to make quite clear to the kindergarten teachers the great necessity of thoroly understanding the underlying principles of the kindergarten system that they may meet intelligently any question, criticism, or argument in regard to it. While their preliminary training does much of this, only the maturity of mind which comes with later experience can master the philosophy of the system. What a wonderful help to the cause of the kindergarten if all teachers could be ready to meet criticism fairly!

And now as to a few of the practical means of carrying on supervision:

1. Visits will be made to the kindergartens by the supervisor.
2. Individual conferences following these visits will be held.
3. Voluntary written reports from the directors may be encouraged.
4. General meetings of different kinds will be arranged for.
5. Smaller group conferences for special work may be called.

The first means is by far the most satisfactory: the personal visit to see general conditions; the attitude of the teacher to her work, to the children, to the school in general. If there is opportunity after the session is an excellent time to exchange ideas. If not, an appointment at the office may be made. In either case matters are to be talked over privately, helpfully, with emphasis always on the good points first, and then help for the weak places given. We must ever keep in mind in these conferences that "only one who loves may criticize." The teacher must always be placed at her best in the school, in the conference, or in the general meeting; it is her

right to be so considered. As some psychological principle is usually involved, an excellent plan is to follow the conference with a suggestion of some reading along the line. This not only helps in the particular difficulty but may also stimulate to continued research.

The written reports from the directors should be entirely voluntary. They should prove a most effectual asset in promoting the closer personal touch between supervisor and teacher.

In regard to the meetings there is much to be said, for really this is where the supervisor must do the greater part of her work with the teacher, especially in the large systems. In planning them great care ought to be taken not to overburden the teacher who must have time to live. I heard a remark made recently by a teacher of wide experience and efficiency in regard to a drawing supervisor. "It is a pleasure," she said, "to attend Miss Blank's meetings. No one objects and will undergo any inconvenience because one gets so many ideas which help not only in the drawing, but all along the line." With the idea of inspiration and preparation clearly in mind, the supervisor may vary the meetings as much as possible. Aside from practical discussions, the teachers should be vitalized by contact with some ideas outside their routine, something which will broaden the vision, for we know it is impossible to be a good teacher if one is not a student.

Then some, at least, of the meetings should be open to the primary teachers who care to come. "In union there is strength." Our co-operation should not stop with the kindergarten and primary-grade teacher, but should extend to the other departments as well. It is quite necessary that the kindergarten supervisor should have the viewpoint of the other supervisors of the system and know something of the scope of their work. It would also be most valuable to have inspirational talks from the superintendent and the supervisors of other departments from time to time, for it is excellent to come in contact with these thinking men and women outside of our own line of work. We have been too much inclined to stand alone.

Coming back, now, to the thought of the closer connections of the kindergarten and primary school, I am altogether of the opinion that the kindergarten and its ideals have a wonderful future; that we have only begun to realize their significance in the educational world.

In a recent book on *Genetic Psychology*, by G. E. Partridge, which is an epitome of G. Stanley Hall's educational theories, we find some interesting statements. To quote from this treatise:

> It is true that the school, as it is now conducted, takes the child from home and play too early, but the remedy for this is not to begin school later, but to change its methods. At present the first two years are likely to be almost wasted, for the school takes a child at an age when there is often weakness and ill-adjustment, shuts him up and away from nature and free social life, forces him to use only his small muscles; failing to see that all interests are now motor and demand free expression. All natural instincts should be given

free and wide opportunity. The kindergarten ideals, rather than those of the higher grades, should dominate until the age of eight, and the time devoted to filling the mind and cultivating experience and expression.

Again he says:

All the grades of the school need to be infused with the spirit now best represented by the best kindergarten ideals. The primary school should connect with the kindergarten and continue the methods . . . . there begun. Nature, life, and live language should, in primary years, have free access to the mind of the child.

Along this same line is Dr. Hailman's article in the April *Kindergarten Magazine* entitled, "A Dream." I believe, with him, that, in time, instead of having the kindergarten housed in cramped quarters in the grade buildings, as it is to a large extent now, there will be a segregation of the lower primary from the elementary school; the kindergarten and the primary will be united, and the education of the child continued along the line of natural tendencies. Then there will be no prescribed time to learn to read and to write, any more than there is for learning to talk and to walk. Why *should* there be? We shall not find it necessary then to say, "At six, thou shalt begin to read," any more than we should say, "At two thou shalt begin to talk." Under present conditions we are doing violence to the child, by obliging him to conform to a system which proceeds in an order just about the opposite of that which the all-wise Creator meant him to follow. The primary school has come down from the university with the university's idea of formalism. Froebel taught that nature shows us in the child himself the process by which he must be educated. "And he took a little child and set him in the midst of them." Christ meant the child to be our leader, our hope; but it has taken all the Christian centuries to recognize this as a principle of education: that we must begin with the child and follow him.

THE VALUE OF OUTDOOR KINDERGARTENS

ADA MAE BROOKS, PRESIDENT, BROADOAKS SCHOOL, PASADENA, CAL.

The value of the outdoor school is no longer debatable. It has passed that stage. The question is how to make it workable.

No one questions that the need of humanity is a clear, spiritual vision. No one questions that this is best obtained thru the keen, clear-seeing mind. No one questions that the mind is freshest, keenest, when untrammeled by the physical. Everyone knows that for physical fitness the lungs need pure air, the growing body needs freedom, the eye needs the far reaches and the restful, changeful colorings of nature. Everyone knows that the typical schoolroom does not furnish these. They are just at hand, just outside, just thru a door. So near! Then why are we so long in coming into our own?

Why are we so long in claiming our inheritance—this big, rich inheritance? *Because we've been so long indoor teachers.* Our movements have

been regulated for so many years by four limiting walls, and tho the eye has caught outdoor visions thru the shaded windows, yet we have allowed these walls to "a prison make," confining the body and hindering the spirit. We have even feared the outdoors; for example, at beautiful Avalon, on Catalina Island, where the new schoolhouse was built with windows high on the ocean side, fearing the distraction of wide waters and passing vessels.

Pardon the humiliating comparison, but have we not been something like those old work horses which, given their freedom after years in double harness, went round and round in their big new pastures, in couples, just as they did when they were in the restraining harness? That we are bound today by the old habits we have abundant proof. Pardon a personal allusion. A teacher came to us with the highest recommendations. She proved herself fully qualified for the shut-in school, but frankly owned to being disqualified for the outside one, resigning before anyone had even criticized her, saying: "I miss the rows of desks and the formalities of my old schoolroom. I just can't teach with the children seated around the tree." (We have a table like Froebel's around an oak tree.)

It was the same with a gymnasium teacher some years ago, who did not see how to take his class outdoors for their exercise because there were no desk rows in which to have them perform. Unlike the chambered nautilus, we stay in the low vaulted past and allow ourselves to be chambered and cramped by the old shell.

The first requisite of an outdoor school is an outdoor teacher. The outdoors is secondary. Where find her? Keep that question in mind and pardon a seeming digression when we bid you look from the present out and back to your childhood days. There are meadows and bees, grain fields with their annual mystery of varied seed and waving harvests. See the hazelnuts and hickory nuts and walnuts gathered by rollicking boys and girls in the autumn. Remember the cows driven home from the pastures, the eggs gathered from the mow. Hear the birds singing in the trees. See yourself among all and of it all. Now look again on your present self. Do you find there any love for those things? They were so lovely in the happy free days. Have you kept the spirit of it all? And would you share it all with the children? Then you have the first requisite for an outdoor teacher. If you have this spirit you will appreciate the little Los Angeles boy, considered the most interesting child in his room, who managed to play truant fifty-three days this spring, spending his time in the park, and when questioned as to how he spent it, he said: "Oh, with the tadpoles and things." You will appreciate and love Marie who came panting and dirty an hour late to kindergarten tumbling a big newspaper bundle in her teacher's lap, exclaiming: "Look out, it will bite," said bundle proving after delicate handling to be a young gopher, which Marie had discovered on her way to school and had dug up, confining it in the paper with a quantity of soil so, as she sympathetically explained, "that it would be happy."

You will welcome Helen who came late bringing with glowing face to a sympathetic teacher her gathered dress skirt full of things which had said good morning to her on her way to school.

You will appreciate these children and want to supply their needs which are only fully met by the outdoor school. But there will be many adjustments to be made. A real outdoor school must take into account sunshine and shade, wet and cold, nesting bird and fluttering butterfly, slimy slug and opening flower. Take them all into account and use them all. And let me say that the best outdoor school is completely outdoors with a near-by sheltering house—best for several reasons. Then there is no roof to shut us out from the beauty of the strong tree limbs, the grace of the moving green leaves, the depths of the infinite blue beyond.

It's very, very beautiful and seems so entirely natural to hear above us that sweetest of bird music, a grossbeak's liquid trill, to catch a brilliant flash of orange and black and yellow-white and to discover that a pair of these birds have established a rival outdoor school in the branches just over our heads, where the bird students are taking their first lessons in flying. With keenest interest and with sympathetic appreciation we watch these beginners as they teeter hesitating on the edge of their nest, then quiveringly take their flight down and out to the lawn where by and by they share apples and crumbs with the delighted children. Just beside our tables a pair of towhees companion with us, while on a high branch a red-headed woodpecker tap-tap-taps, calling our attention to his nodding approval of our wisdom in patterning after the birds. A discordant call and a flash of azure, and a jay screams his second to the woodpeckers. A droning undertone, and a big black-and-yellow bumblebee passes ladened to her outdoor school in a neighboring log. Oh the wonders that are revealed to us out under the trees and skies! There "heaven is given away." There "God is had for the asking."

But the freedom of the outdoors calls for careful planning. Is it warm? Shade is sought. Is it cool? Tables are moved into the sun and big hats are donned. Cooler? Sweaters are drawn on. Damp? Rugs are spread. Damper? Rubber shoes are worn. Dampest? If it rains, tables and chairs are moved indoors by the fire. The question arises: "Does this not tend to dissipation of thought?" "Will the children learn concentration when there is so much about calling attention from their books?" We answer: "We find the children develop a sixth sense: the relative value of things. They do not make that rigid distinction between the real world and the book world which is so common and so disastrous, but consider that they and their teachers and books and nature are all one. We think that it is not dissipation to give attention to every passing phase of God's handiwork. It's appreciation. We think that concentration is gained by this absorbing interest in nature's lessons. We think the child's education well begun if he has learned to look with wide-open eyes and

intelligent mind upon all of this big interesting world that comes within his radius." If this is error, our greatest have erred.

> There was never a king like Solomon, not since the world began;
> Yet Solomon talked to butterflies, as man would talk to man.
> There was never a queen like Balkis, from beginning to the end;
> Yet Balkis talked to butterflies as you would talk to a friend.
> She was queen of Sabea and he was Israel's lord;
> Yet both of 'em talked to butterflies when they took their walks abroad.
> —Kipling

And are not the children and the world thru them losing much because of this lack of freedom, this opportunity to grow? Our poets will not be able to sing their sweetest notes; our statesmen will not be so strong or teachers so wise and sympathetic if something of the bird's song, the oak's strength, the harmony of all nature have not become a part of their lives.

Sitting at her table under the oak one morning a little poet, sunny-faced, nature-loving Polly, gently said: "I've made a poetry." And while we waited expectantly she gave:

> I love the sun when it shines,
> I love the rain when it rains,
> I love the spring,
> When the birdies sing,
> I love every growing thing.

And right there with the birds joining in we set it to music and have named it, "Broadoaks Confession of Faith."

A very different kind of character is our four-year-old Dorothea, the strong, the born leader, who outstrips all rivals in contests of strength, who has conquered by climbing the oak, who has Waterloos to meet before she learns that there are forces which even she cannot control, and who is meeting them here under careful guardianship—Dorothea who says: "When I am big I am going to boss God." Would you spoil the world of a poet's song, of a leader's strength, by limiting their powers to the schedule of the regulation school? Ideal conditions may not prevail. Broadoaks and near-by Arroyos are not for all, but with the outdoor spirit a teacher will take every advantage offered. A superintendent said of one of his teachers who sought every opportunity to take her class out: "Give her a bench in the yard and she will have a kindergarten." You haven't trees? Then plant them. You haven't the grounds? Then work to get them or as some have done, go out on the roof. Our climate is cold? Then wrap up. You can at least open windows, and will if you have the open mind—a mind unfettered by creed and dogma, a mind uncontaminated by the unfruitful past.

THE EFFECT OF THE SCIENTIFIC SPIRIT IN EDUCATION UPON THE KINDERGARTEN IN RELATION TO MATERIALS

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Froebel held education to be a process of development thru the self-activity of the child, and taught also that the "child, the boy, the man should know no other endeavor than to be at every stage wholly what that stage calls for." Yet he was not always able to apply these principles consistently in his working plans. He at times seems to have forgotten his theory of development, and to have used the method of abstract instruction. That he should have fallen into this error is not strange. Our wonder and admiration grow at his insight into the nature and needs of little children. He grasped by intuition much that has since been set forth by psychology and science. His mistakes in the use of materials were due largely to the limited knowledge of his day. Froebel had the spirit of the true scientist. As long as he lived and worked he was constantly modifying and reconstructing his theory and practice. However, at his death Froebel's followers adopted the kindergarten as he had left it, accepting as final and authoritative work which he had regarded as tentative only.

During the decade between 1890 and 1900 genetic psychology and the child-study movement turned serious attention upon the varied phases of child life and child education, challenging much of the theory and practice of current school procedure, including that of the kindergarten. As the criticisms became more general and insistent, kindergartners gave heed to them and began a serious study of the subjects with which their theory and practice seemed to conflict. It is impossible to discuss here the adaptions being made by various bodies of kindergartners. We shall therefore confine our treatment of the current use of materials to that made by the growing body of so-called "progressive" kindergartners who were pioneers in this movement of reconstruction.

Child psychology pointed out to the kindergartner that she was failing to see the true relationship which should exist between the child and materials. The logical organization of the geometrically related series of materials, the so-called "gifts and occupations," was thoroly satisfying to her adult mind. Each element of this series she considered essential to every other, and the whole was used as an "alphabet of form" by means of which the child might "learn to read all material objects" and "acquaint his mind with the general properties of matter." Since these materials were considered of independent worth and value it was natural that they should come to hold a place of isolation, unrelated, except incidentally, to the other elements of the kindergarten program, developing along

independent lines thru logical series of exercises. The traditional kindergartner was so intent upon unfolding this series to the child, and bringing to his consciousness certain qualities and ideas inherent in the materials, that she did not perceive that she was failing to meet the real needs of the child, that she was developing materials rather than boys and girls, and making gifts and occupations an end instead of a means. Child psychology, for the time being, turned her eyes away from the "charmed circle" of materials, and toward the little child with his impulses, instincts, and capacities, reaching out for, and responding to, materials. It led her to see that the gifts and occupations were, in their organization, more logical than psychological, that little children were not capable of grasping the definite, logical connection within materials, that what had appeared a sequence to the mature mind was not a sequence to the immature mind. Subject-matter to be real to the child must become a part of his own social experience. He must feel an interest in, and a need for, this material. All the experiments of child psychology show that children of four and five have only a slight interest in such abstract qualities of material as form, color, etc. It is the purpose of the thing, what he can do with it, how he can use it in a life situation, that is his absorbing interest. If form, color, number come to consciousness thru function, thru the use of material in a natural, vital situation, as they inevitably will, well and good; but to lead the child constantly to observe attributes of objects, and to classify and "interpret the universe" according to "type forms" is unpsychological and unpedagogic, and "tends to arrest the child's development upon the plane of the abstract phase of things," which, as Dr. Harris maintains, is injurious to the mind.

The gifts and occupations, then, are not regarded by the progressive kindergartner as a series of material of value and worth in itself. Certain of the gifts and occupations, however, she holds in high esteem because they stimulate and satisfy in the child valuable instincts and impulses which are seeking for expression; among these are the impulses (1) to make, to construct; (2) to record and interpret experience; (3) to investigate, to experiment; (4) to arrange and decorate; (5) to co-operate and compete with others and with self.

In her selection of materials the kindergartner must consider, first of all, the past experience, and the present capacities, needs, and interests of the child. She must ask herself, not what the child will need in the future, but what he is reaching out for today; what will make his present life richer and give it deeper meaning. But she must not confine her attention to a study of the child's instincts and impulses alone. "It is one thing," says Dr. Cole, "to respect instincts and impulses, and another to admire them as they blindly perform an unassisted work." The kindergartner must give careful study to the values which society and the race have placed upon ideas, activities, and materials. She must be able to see in

the child's play and in his crude achievements the dim beginnings of the different branches of race civilization. She must know the child as he is today, and know also what she wishes him to become, and then furnish him with material which will satisfy his present need, and will lead him on to the next step in advance toward the desired goal.

This aim will lead the kindergartner to come to all material alike with a questioning attitude, and to study each separate material in order to determine its special function and value in organizing the child's present experiences and activities. It will lead her to eliminate some of the Froebelian gifts and occupations, to place special emphasis upon a few, and to add materials not included in the orthodox sequence.

The interests of the playing child are largely social. He tries thru his motor activity and imitation to adjust himself to his environment. He seeks to express thru his materials the images and ideas which have come to him from the life which surrounds him. The kindergartner, if she meets the child's needs, will help him to do what he is already struggling to do, therefore she will select those materials which are best suited to satisfy his impulse to express, represent, and interpret his social environment. The progressive kindergartner finds certain of the gifts of value because they afford excellent opportunities for play, for construction, for expressing ideas, and for free investigation and experimentation. First on her list she will place the building blocks, as better suited to the play purposes named above than the more abstract surfaces, lines, and points. Some of these latter gifts she may discard entirely. The others she will use only to a limited extent, as they seem particularly fitted to express the desired play idea, or for experimental work. Colored balls and balls of various sizes and materials are well adapted to play purposes, and have an educative value. The second gift probably will be retained, not because of the symbolic value of its forms, however, as representing the "mediation of opposites" or because of the geometric "type forms" by means of which all objects in the child's world may be classified, but because it combines to advantage with other gifts for constructive purposes, and in certain plays is adapted to the representation of social ideas.

Since the progressive kindergartner does not feel the importance of having the little child handle the unit of measure, the inch, in his play materials, she is glad to heed the warning of the physician and discard her small gifts for those of larger dimensions in order that the strain on nerves and muscles may be minimized. The children often sit upon the floor when playing with these materials, gaining in freedom of movement and calling into play their larger and more fundamental muscles.

The progressive kindergartner no longer divides the forms to be made with the gifts into those of life, beauty, and knowledge, for she realizes that this is an adult division, and is not felt by the mind of the child. She has learned, too, that the kindergarten child has only a slight interest in

abstract knowledge and very little use for it in his life, and that his interest and enjoyment in producing objects for purely æsthetic reasons are also slight. The artist tells her, too, that most of the so-called æsthetic forms produced with the gifts are crude and inartistic, and that other materials are better adapted to the beginnings of art expression than blocks and tablets.

Down thru the ages man has used two general methods in handling materials. Either he has discovered a new material, experimented with it to learn its characteristics, possibilities, and use, or he has felt a want and looked about for the best material and the best means of satisfying that want. He has set himself a definite problem and worked for the solution of it.

In his undirected play with materials the child makes use of both of these methods, and the progressive kindergartner finds each of educative value. The first method, that of experimentation, of investigation to discover the characteristics and possible uses of the material, is as a rule the best method to use when the material is new, for the child comes to such material with a questioning attitude, and the good teacher is one who encourages the child to discover for himself.

In the second method, the child works consciously toward the solution of a definite problem, toward the most satisfactory expression of an idea. All good thinking centers around a problem. Here the purpose or end may be set by the child, suggested by some past experience, or in line with some present interest. The child may select the material which he feels is best adapted to carry out his purpose, and then use his own method to attain that end, or the teacher, trained in psychology and in sympathy with the child, often understanding his interests, desires, and needs better than he himself does, may set up a problem which the child adopts at once as his own. The child may select his own materials to reach this given end, or she with her greater knowledge of the possibilities of material may feel it wiser to select for him, leaving the child free to proceed with the solution in his own way. But at times the teacher may feel that a greater benefit will be derived by the children if even the process of solving the problem is furnished. The kindergartner finds one of her greatest problems to be that of keeping a sane balance between impression and expression, between imitation and invention. Each has an important part to play in the child's development. Creativity she acknowledges to be the highest type of work, but it must follow and be based upon the imitation of many well-chosen patterns. The child himself often chooses to imitate in order to gain experience or because the product of another expresses his idea in better form than he himself could express it. His standard of expression is raised to a higher level thru such imitation. Nevertheless the kindergartner realizes that freedom of choice and self-direction are necessary elements in development, and so she leaves room in each lesson for some degree of experimentation, of self-expression.

The methods stated above are only suggestive of those which the progressive kindergartner uses in her earnest attempt to respond to the need of each child. She will choose each day the method which she feels will best carry each individual child on to the next step in his development.

In an age when all things are being tested and tried, and only those things which can prove their worth can survive, it is fortunate for the kindergarten that its advocates are bringing the spirit of the scientist into their work, testing kindergarten theory and practice, and holding fast only to that which is good.

THE EFFECT OF THE SCIENTIFIC SPIRIT IN EDUCATION UPON THE KINDERGARTEN IN RELATION TO THE DISTINCTIVE CHARACTERISTICS OF THE MONTESSORI METHOD

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The scientific spirit is not a know-it-all attitude. The millennium of scientific spirit in education will come when you and I and our fellow-teachers are eager and open minded, investigative and adaptable—not when we are all perfectly wise and convinced of our wisdom.

It is possible to have the scientific spirit in high degree without having full or up-to-date knowledge of any science. This fact has never been more convincingly proved than in the case of Dr. Montessori. Even the frankest critics of Montessori agree that she is scientific in attitude, but as to her knowledge, even her friends apologize. Well-known authorities in six branches of science—biology, sociology, pedagogy, psychology, hygiene, and medicine—refute her chief claims and theories. As has been well said by Professor Kilpatrick of Columbia University, who was one of the committee of experts sent to Rome to study Montessori's work, her system "has the spirit but not the content of modern science." She is like an explorer undertaking geographical research while ardently believing that the earth is flat. This fact is not so unexplainable as it appears. During the last ten years Italian universities have challenged the admiring attention of all Europe by awakening from mediævalism. But Dr. Montessori took her medical degree twenty years ago. Ask your physician whether, even yet, he would go to Rome instead of to Germany for post-graduate work in medicine.

I have just said that experts refute Montessori's chief theories, while still appreciating her personality and work. If you wish to become informed on this subject in the shortest possible time, I advise you to get the *Scientific American* for June, 1912, *Education* for September, 1912, the *Dial* for May, 1912, the *Nation* for June, 1912, and especially, to bring your information up to date, get the *Kindergarten Review* for April, 1913.

In the latter magazine are three masterly analyses of Montessori's principles and methods. There you will find Professor Bigelow's statement that Montessori's biology is "generally weak, often incorrect, and at times absurd." Professor Holmes of Harvard says that her chief sociological idea—the plan to communize the motherly care of little children so completely as to enable the mothers of little children to become wage-earners—would involve "a vital and undesirable change in our social organization." Professor Holmes also warns against the dangerous practice of isolating the senses. In the same magazine Professor Kilpatrick shows that Montessori's pedagogy is based on the doctrine of formal discipline or "mental gymnastics"—a theory which was exploded twenty-five years ago—and characterizes her psychology as "false." Professor Earl Barnes refutes her claim to have discovered discipline thru liberty, by saying: "The absolutely determined nature of her materials denies the assertions of freedom." Also he denies her claim to originality by calling attention to the similarity if not identity of her patented materials with those of Seguin, which have been used in Massachusetts since 1848, and in New Jersey since 1880.

If in view of all this evidence we must admit that Montessori's knowledge of fundamental facts and principles is untrustworthy, why is it that she is still recognized as scientific in spirit? The chief feature of Montessori's method is that she tries to adapt herself to her children, first individually and then collectively, and this is a scientific purpose, whether she carries it out wisely or not. This same purpose animates the modern child-study movement, which, contrary to Montessori's procedure, uses the knowledge of abnormal children as a side-light while keeping the knowledge of normal children as its main point of view.

Montessori's magnificent declaration of independence for child nature is perhaps her chief claim to attention in our republic, which still retains monarchical government and military teaching methods in most of its schools. But here and there, all over the country, educators are trying experiments in liberty, seeking to balance justly the rights of the individual and of the group. This problem also must be solved by child study, which offers practical ways of discriminating the masses of mediocre or so-called normal children, who can wisely be taught in squads, from the comparatively few who are so brilliant or so backward that they need special educational treatment.

Montessori has adopted and applied to normal children a striking characteristic of Seguin's method of educating mental defectives. His system, which for over half a century has been called the Franco-American method, used to include the practice of trying to isolate a part of the brain from co-operative working with the rest of that organ, in the hope of strengthening one part at a time by intense use. Montessori jumps at the conclusion that if a child is blindfolded, the seeing part of his brain is idle

and that his whole mental energy is therefore free to concentrate itself on some other sensation. But anyone who has ever had a nightmare knows that even with closed eyes the brain is entirely capable of "seein' things at night." Seguin himself said: "What enters the mind alone dies in it alone." The truth is, the only thing that saves isolated sense training from being harmful to mental co-ordination is this fact that it fails to isolate.

Sense gymnastics, aiming to intensify the keenness of the sense organs, is another idea borrowed from Seguin. This method has been used in the Massachusetts School for Feeble-Minded ever since its founding sixty-five years ago. It is still used in its original form (that is, for the individual awakening of an abnormally unobservant child, not for class drill) in Dr. Seguin's own school at Orange, N.J. Yet neurologists the world over agree that sense-exercise cannot possibly produce sense-sharpening—cannot increase the keenness either of the sense organs or of their cortical centers. Dr. Adolph Meyer says: "The word 'sense-training' is a misnomer. It is really attention and reaction training."

As to the value in life of exceptionally keen sensations, every teacher has an opportunity to compare children who were born of predominantly sensory type with those who are chiefly motor. The motor child does not always react appropriately to a stimulus, because he is more interested in action than in how to act; the sensory child, on the contrary, is so interested in contemplating the stimulus that he sometimes forgets to act at all. Of course both these children are of one-sided type; a well-balanced mind concentrates its attention half way between sensation and movement. The task of education is to promote such balance, even in one-sided children, as much as can be done without violating their natural bent. This is a far higher aim than to produce a generation of tea-tasters, piano-tuners, perfumers, dry-goods experts, and other sensory specialists. If human beings could attain the sight of eagles, the scent of hounds, and the delicate touch of butterflies' antennae, they would become, not supermen, but hypersensitive nervous wrecks.

Montessori is doing well to spread the doctrine which Dr. Fernald of the Massachusetts School for Feeble-Minded has been preaching for a quarter of a century; which is, that the teaching of normal children would be greatly eased by the adoption of certain procedures which have been proved to economize the nerve force of subnormal children. But Montessori should learn to discriminate between two wholly different classes of so-called "special" pedagogic methods, the first of which is not needed except by abnormals. Dr. Seguin supplied children who need two or three years of daily training to enable them to lace a shoe with lacing frames like those of Montessori. He did this instead of using the real shoe of a real child, or of a large doll, not to economize nerve force, but to economize shoe leather. A lacing frame is cheaper than a shoe for such destructive use by children who spend as much effort in trying to chew the leather as to lace it. But there

is a whole repertoire of methods which teachers of the subnormal have been forced to devise, because the limited nerve energy of their pupils made none but economical methods of using nerve force effective. This repertoire ought to be added to the stock of every teacher, for nerve force is too valuable a commodity to be wasted, no matter how superabundant a normal child's supply may seem to be. This is believed, not only by those who have made practical use of such methods, but by psychologists like Professor Angell, of the University of Chicago, who has reached the same conclusion by a wholly different line of reasoning. He is authority for the statement that the next step in the progress of educational science awaits the application of the facts of abnormal psychology to normal pedagogy.

A striking expression of the child-study spirit in Montessori's work is the alert silence of the teacher. Montessori takes Froebel's advice to "follow the child" much more literally than kindergartners do. The latter are aiming to give children a wealth of ideas about their environment, and hence are tempted to overstimulate. But Montessori's temptation is to understimulate. The scientific spirit seeks a happy medium between these two, which I believe can be attained when teachers take the trouble to learn the facts as to which part of the brain is exercised by the kindergarten activities, and which part is chiefly involved in the Montessori activities. You know that when you do a thing consciously and with more or less difficulty, you are using your cerebrum; but when you do a complex thing habitually or automatically, such as fastening your gloves or taking the separate steps necessary to arrive at a certain place, your cerebrum is practically free to think about other things, because your cerebellum or "little brain" is controlling the movements. No sporadic or useless activity ought to be allowed to become automatic, but many of the ordinary useful acts of daily life ought to be made automatic for the sake of leaving the consciousness free to direct higher and more complex co-ordinations. Now Montessori's strong point is that she trains the cerebellum and spinal cord—she deliberately tries to make the child an efficient automaton. That is why so many observers of her work have remarked on the striking resemblance between her methods and those of animal-trainers. Her weak points are that she largely neglects the training of the cerebrum, and does not show delicate discrimination as to what forms of activity are really needed as lifelong automatic habits. What is actually happening when a child manipulates the cylindrical insets for days or weeks at a time is the gradual transfer of brain control from the thinking cerebrum to the unthinking cerebellum. In the case of this particular activity, what's the use? It is easy to see why some children like to accomplish this transfer, which satisfies the instinct of activity while leaving the cerebrum free to indulge in the dissipation of mind-wandering.

The phase of Montessori's method which is most alluring to ambitious parents is her too early teaching of writing and reading. The unanimous testimony of biologists, neurologists, and psychologists is that certain fundamental parts of the brain develop first, and their accessory association areas mature later. Speech is a fundamental power, reading is accessory to it, depending on an adjacent and later-matured part of the brain. In the same way, drawing is fundamental and writing is accessory. Surely it is only common-sense to exercise the earliest developed powers first, knowing that thruout organic evolution, from the lowest form of life to its human apex, the higher functions are reached by development from the lower. We can draw a most enlightening comparison between two nations, one of which trained the primary mental and physical powers, allowing the secondary to ripen and bloom naturally, while the other nation for more than two thousand years has followed the order of training which Montessori uses.

The first of these nations is ancient Greece, whose achievements in physical and mental development are still our unattained ideal. The athletic training of the Greeks developed intelligent co-ordination of the larger muscles to the highest degree, not of brute strength, but of symmetry and efficiency. Their outdoor schools, in which pupils and master wandered together thru beautiful groves, mutually seeking truth, gave every opportunity for developing each part of the brain and physique at the time of its natural ripeness for development.

The second of these nations is China. The Chinese method is to begin the child's training at a very early age. Writing is taught before reading, and both these forms of abstract word-expression are taught before they can be understood. The writing-books have double tissue paper leaves, within which the copy is inserted, to be traced again and again until it can be reproduced freehand with the help of the muscular memory acquired. Arithmetic is taught concretely thru hand activity by means of the abacus, and additional finger training is given along artistic lines, regardless of muscular immaturity. The writing of original poems and subtle philosophical and ethical treatises is the chief goal of education, which is striven for at the earliest possible age. This radically individualistic culture is supplemented by training in the ceremonial forms of courtesy, rather than by the cultivation of altruistic ideals. Individual teaching, and school discipline by individual influence instead of by social consciousness are equally characteristic of the ancient Chinese and the new Italian system.

Of course Montessori's teaching varies from the ancient Chinese procedure in many details; but these underlying principles are very similar. Are we not justified in concluding that the chief traits produced by any wholesale application of Montessori's ideals would be those characteristic of the conservative type of cultured Chinamen before their awakening by the recent introduction of American educational ideals? The reason for

this is plain: that such cerebellar training as Montessori and ancient China have given increases the capacity for willing drudgery but not for originality and invention. It develops the habit of plodding, while right training of the cerebrum develops the impulse to progress.

The Chinese method of teaching the three R's is vastly better than that of Montessori in two important particulars. In the first place, words are learned as wholes, not in artificially analyzed bits. If you use the pink-and-blue letters of Montessori, I would urge you to present them in the Chinese way, at least until the child has a vocabulary of perhaps fifty phonetic words which he has traced as wholes in connection with the ideas which they express. For instance, the three letters, *c*, *a*, *t*, together can be more easily learned than any one of the three separately, and the child can analyze them intelligently afterwards. To learn the whole artificially analyzed alphabet without an idea would insult the intelligence of anyone but a parrot.

Secondly, the Chinese method of teaching number ideas thru multitude is much more direct than Montessori's way of teaching these ideas thru magnitude. The "long stair" has to be translated by the child's mind from its most obvious quality of length into terms of its less apparent quality of multitude before it really conveys number ideas to him at all. The kindergarten materials illustrate number thru both magnitude and multitude.

Montessori emphasizes sensation more than activity, and limits activity chiefly to slow and long-considered movements. In this way she is in danger of effeminizing education to an extreme degree. Professor Thomas in *Sex and Society* says that the only difference between the mental efficiency of man and woman is that men have been forced to form habits of reacting freely and swiftly to the emergencies of a swiftly moving environment—animals, enemies, machinery, etc.—while women have reacted to the more fixed environment of garden and house. He concludes that brain power is developed by the individual being forced to make swift, necessary movements, and that an environment is educative in proportion to the variety of its sudden hindrances to the carrying-out of the individual's strongest purposes, thus stimulating his powers of invention and adaptation. If this is true, no part of the educational system, from the kindergarten up, can afford to ignore it, for it implies that our present sedentary form of education, given almost exclusively by women, is trying to make all children as girlish as possible. This is especially inappropriate in this dawning era of social and political co-operation, for soon no young citizen of our republic will be justified in being exclusively boyish or girlish, or anything less than wholly human.

Montessori has done us a great service in reminding us to develop and to appreciate all those simple and gracious forms of service by which a little child can be helpful in the home and garden. But in addition to this we must also virilize education by adapting to it the ideal of the modern

playground movement: not play for its own sake, but frequent periods of strenuous non-habitual activity, for self-development, for alertness, for swiftness and wholeness of mind action. This would necessitate the fullest use of all the senses, for the sake of prompt co-operative action.

The Montessori Movement has roused the kindergarten profession to a new insight, and challenged it to begin a new era.

What is this new insight? When we try to describe it we find it as old as the world. It is the habit of understanding a child from the inside, instead of gazing at him from the outside. It is an outgrowth of the motherly habit of feeling the pin that pricks the baby. But, instead of being an unreasoning instinct, this power must be patiently acquired thru years of the most minute and accurate observation of children, supplemented by memories of our own childhood. The slogan of the Conference on Mental Hygiene at Boston this spring was: "The chief business of society is to evolve adults fit for children to live with." In proportion as we understand and direct sanely the workings of our own minds, shall we be fit to do the same for the "long, long thoughts" of childhood and youth. No teacher is equipped for teaching until she has somehow gained a clear and intimate knowledge of what was going on inside of her own skull at the chief stages of her development. We must saturate ourselves in the restlessness, the wistfulness, the likableness of human nature in order to rest and satisfy and transfigure "the least of these."

And what is the new era toward which we are tending? An era of scientific teaching: that is, of open-minded teaching. Come, let us cease to be content with any method, no matter how good, and cease to waste time in fighting any method, no matter how imperfect. Let us struggle ever for deeper acquaintance and more wholesome physical as well as mental comradeship with our own children; and strive ever for more efficient co-operation with all teachers.

This is the scientific spirit in education.

DEPARTMENT OF ELEMENTARY EDUCATION

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FIRST SESSION—WEDNESDAY FORENOON, JULY 9, 1913

The Department of Elementary Education met in joint session with the Department of Normal Schools in the Tabernacle and the following program was presented:

Topic: "The Training of Teachers":
a) "In Normal Schools and Colleges of Education"—Z. X. Snyder, president, State Teachers College, Greeley, Colo.; John R. Kirk, president, State Normal School, Kirksville, Mo. (For papers see Department of Normal Schools.)
b) "In Service—Adjusting the Normal-School Graduate to the City System"—Frances Jenkins, supervisor of elementary grades, public schools, Decatur, Ill.

The following persons were appointed as a committee to nominate officers for the ensuing year:

C. P. Cary, state superintendent of public instruction, Madison, Wis.
W. P. Evans, state superintendent of public schools, Jefferson City, Mo.
John MacDonald, editor, *Western School Journal*, Topeka, Kans.

The meeting then adjourned.

SECOND SESSION—THURSDAY FORENOON, JULY 10, 1913

The department met in the Tabernacle at 9:00 A.M., and was called to order by the chairman, I. I. Cammack, superintendent of schools, Kansas City, Mo.

The first paper, on "The Effect of Kindergarten Work on Children in the Grades," was presented by Ernest O. Holland, superintendent of schools, Louisville, Ky.

A paper entitled "Some Experiments in Elementary-School Organization" was then read by Samuel W. Brown, State Normal School, San Francisco, Cal.

The discussion which followed was led by Mary E. Griffin, principal of the Lowell School, Kansas City, Mo.

The Committee on Nominations presented the following names:

For *President*—M. E. Pearson, superintendent of schools, Kansas City, Kans.
For *Vice-President*—J. W. Crabtree, president, State Normal School, Fall River, Wis.
For *Secretary*—Frances Jenkins, supervisor of elementary grades, public schools, Decatur, Ill.

The nominations were approved and the officers elected.

The meeting then adjourned.

THIRD SESSION—FRIDAY FORENOON, JULY 11, 1913

The department met in joint session with Departments of Rural and Agricultural Education and Manual Training and Art Education, and was called to order at 9:30 A.M.

The following program was presented:

"Rural Schools and Community Needs"—Perry G. Holden, International Harvester Company, Chicago, Ill. (For this paper see Department of Manual Training and Art Education.)

"Agriculture and Gardening in the Public Schools"—Clayton F. Palmer, supervisor of agriculture, public schools, Los Angeles, Cal. (For this paper see Department of Agricultural Education.)

"Some Eliminations in the Content of Arithmetic as a Factor in the Economy of Time"—W. A. Jessup, director, School of Education, State University of Iowa, Iowa City, Iowa.

The meeting then adjourned.

J. H. MARKLEY, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

THE TRAINING OF TEACHERS IN SERVICE—ADJUSTING THE NORMAL-SCHOOL GRADUATE TO THE CITY SYSTEM

FRANCES JENKINS, SUPERVISOR OF ELEMENTARY GRADES, PUBLIC SCHOOLS, DECATUR, ILL.

For a half-century the normal schools have been sending their graduates into the schools of the land, and from the first it has been recognized that they were an inspiring force in the uplift of our educational system. Since we recognize that the normal graduate has a distinct contribution to make to the city system, yet that she has much to learn, the early years of the graduate's teaching life are appreciated as the period in which wise supervision may help the struggling young person to reach a maximum of efficiency with a minimum of struggle.

The city system which rests content in having its teachers realize no relationships to the system except to make reports and sign the pay-roll will not be burdened with this problem of adjustment. The system which is so organized and administered that every member appreciates that he is recognized as a contributing factor finds this one of its greatest problems. The adjustments discussed in this paper are those which are made in a small city of the Middle West which is trying to help its teachers to grow professionally thruout their period of service.

The placing of the young graduate in grade and school receives careful attention, the inspiration which she may receive and that which she may give both being factors to consider. So long as she remains in the force, transfers may be made to give her greater opportunities. In so far as a busy office can help in finding comfortable homes for teachers, this is done, and teachers are urged to live where conditions are favorable to good work and good health. A series of meetings with new teachers is held to emphasize the salient features of the work in the system, to acquaint teachers with the various helps provided for them, and above all to bring

about from the first a co-operative attitude between teachers and supervisors. These factors are common, however, in other city systems.

A unique type of school visitation has been developed in our schools during the last four years, and so much gain has come from it that I take this occasion to describe it at some length. Based upon the critique lessons which have proven so helpful in our normal schools, it comes closer home to those participating in it because of the motivation underlying it. As soon as our schools are well under way, usually early in October, a schedule is arranged whereby the new teachers, and such experienced teachers as desire, may visit the best work in the system in company with the supervisor of elementary grades.

A group of four or five meet at a given school, visit two classrooms, then spend an hour in discussion of the work seen. Another school is visited in the afternoon, and a discussion follows. Occasionally the classes visited are dismissed so that their teachers may take part in the discussion. A brief report is sent in to the office during the next fortnight by each teacher who has visited, in which are stated the most profitable outcomes of the visiting day. These are summarized and the summary distributed to all teachers interested, becoming a permanent contribution to our school records.

The normal graduate responds most readily to the co-operative type of supervision. The attitude from the first is likely to be that of eager seeking to do what is required, of seizing all opportunities offered. Gradually individual differences assert themselves and a decided difference in rate of adjustment appears. Allowing for these individual differences, however, certain strengths appear which must be the outcome of the normal training, certain weaknesses which offer opportunity for helpful supervision.

In by far the majority of instances the young graduate is able to plan her work intelligently, to break up the body of thought in the course of study into units of work which approximate the pupils' ability, to present lessons with a fair degree of clearness, and to study the aptitudes and interests of her pupils both in subject-matter and in discipline. That the normal schools have succeeded in doing this for their graduates seems matter for congratulation.

Perhaps the first weakness which presents itself is the lack of training in providing valuable seat work and study assignments—in holding a class to definite habits of study. Nothing sooner opens the way for the spirit of disorder, and supervision needs to concern itself from the first in seeing that the beginning teacher is helped in these important phases of the work. Our courses of study have helped much in meeting this problem; an exhibit of class work is kept in our school museum so that teachers may see what other classes do, and a new teacher is urged to observe assignments made by experienced teachers in her own building. A helpful display of seat work is often made in the corridor or office of a school building.

A second weakness, and one which we almost hesitate to name, is lack of knowledge of the psychology underlying drill and of the technique of handling drills. This leads to difficulty in securing specific results, so that the beginning teacher works vigorously at presenting lessons only to find her pupils failing to recall the points made. No one would wish to return to the old type of drill, with its lack of motivation, its failure to reach any meaningful end, but there is much to do in introducing drills which grow out of real needs and which show the pupil his actual accomplishment. Fear of appearing to be a drillmaster may prevent the supervisor from giving adequate help here, but more may often be accomplished for the young teacher by conducting a speedy drill lesson than in hours of conference. It is one of the places where example is better than precept.

A third weakness appears in the teaching of drawing and music. The facts which confront us in our school reports for four years are given here; other cities may not find the same difficulties. During the years 1910–13 the percentage of normal graduates taking high rank in the teaching of drawing was for each year respectively 20, 20, 28, 23, an average of 22, while for all other teachers the percentages taking high rank were 17, 33, 20, 27, an average of 24. In music the record reads: normal graduates, 25, 30, 40, 43, an average of 34, while those not graduates received 26, 27, 28, 35, an average of 29.

Lack of confidence is one element which we find needs to be especially guarded against in dealings with young teachers. A proper degree of humility is sure to be the outgrowth of work based on high ideals, but many young teachers, especially those slow in development, suffer exceedingly thru overanxiety to do the right thing. Many have been made supersensitive by the criticism received in the normal school. To have such a teacher assume a responsibility in committee work or in a grade meeting, to ask for display purposes some well-done bit of work, may show her that the supervisor has confidence in her ability, and help her gradually to the needed self-assurance.

Knowledge of the scientific standards now in course of development, of the scientific attitude toward school problems, proves of interest to the young graduate. Graduates co-operate well in studies of this character. These may be more meaningful coming in this practical way than if they were studied theoretically at the normal schools, but it is to be hoped that at no distant day the normal schools will enter into this line of work more vigorously than at present.

Teaching may be only in part a profession, nevertheless certain professional aspects belong to it. We wish that a few definite principles might be so carefully inculcated that no graduate could forget them, that their use in practice might be assured: the sacredness of a child's name; of the knowledge of his behavior and intellectual progress; the meaning of active

loyalty to the entire school body; the difference between presenting complaints where they may be remedied and using them as gossip.

An important part of the supervisor's work is to present to the normal graduate opportunities for advancement in the profession. The supervisor needs to recognize special talents in these young graduates, and to encourage them in further study and specialization. These abilities are likely to show themselves when opportunity is given to do an original piece of work, to co-operate in some special study. The emphasis upon motivation of school work, the development of new courses of study, the recognition of broader community interests, the study of scientific standards, have all given our teachers new lines of endeavor and have discovered strengths unknown before.

Recognizing that the school is an increasingly powerful factor in influencing the broad community interests, we see the need for helping the normal graduate to make such relationships as will be inspirational to her and helpful to the community. This is one of the most difficult problems confronting the supervisor. Many times intimate personal points of view debar the graduate from establishing effective relationships, prejudices are present which prevent contact, habits of behavior which are unpleasant to encounter. Again, indifference is most powerful in keeping a teacher in a rut. One hesitates to say: "Do you know that your card should be sent in recognition of this courtesy? Why did you fail to return that call? You are mistaken in saying that you have no dress suited for this occasion." Yet one difficulty in establishing right relationships grows out of just such failures to meet common social conventions. The need for making friends outside of the teaching force, for finding wholesome modes of recreation, for assuming community obligations in church or club or charitable work—these are factors with which supervision may wish to concern itself, yet in accomplishing which it finds its hands tied. Our parents' associations offer opportunities for such contact, but only too frequently the graduate has to be told the courtesies of hostess, has to be urged to take the initiative in making the mothers feel at home. The supervisor may be of some help in making these community adjustments thru a personal word here, an introduction there, an opportunity for special recognition or service, but the problem remains largely unsolved, yet in great need of solution.

The adjustment of the normal-school graduate to a city system requires adaptation of each graduate to certain conditions, but even a city system is a growing entity. The contributions made by the progressive graduates to our school system cannot be measured. In nine of our fifteen elementary schools during this past year, from one to three graduates of normal schools, seventeen teachers in all, have done work of superior grade, have made themselves felt as most effective contributors in upbuilding the school, while in two other schools graduates have been a decided inspiration to the

general school spirit. Alert and earnest, they take up the burden of school work and carry it forward with a vigor which stimulates all who are co-workers with them.

The purpose of this paper will have been accomplished if it has shown that adjustment of a normal graduate to a city system is effectively accomplished in so far as just and sympathetic supervision provides ways by which the graduate may learn the phases of teaching not gained in the normal school, may grow to a deeper appreciation of personal responsibility to the school and to the community she serves, and may have opportunity to contribute consciously to the upbuilding of the system itself; the results being the greatest possible personal growth for the teacher, and a high type of social service.

THE EFFECT OF KINDERGARTEN WORK ON CHILDREN IN THE GRADES

ERNEST O. HOLLAND, SUPERINTENDENT OF SCHOOLS, LOUISVILLE, KY.

Some time in the near future we must undertake a very careful analysis of the work of the kindergarten. For instance, we should know what effect kindergarten training has had on the nervous condition of the child and upon his ability to concentrate and apply himself to a set task. We should know, too, if his general physical condition is impaired, unaffected, or improved by a year of kindergarten life. Some people contend that the kindergarten methods have destroyed the child's ability to concentrate, have made him a nervous creature who will require years to recover his normal health, and that the majority of kindergarten children simply want to be amused and have things done for them. Some prominent educators believe that the foregoing indictment is quite true and that the money devoted to kindergarten training is worse than wasted.

Many educators who refuse to take this radical view believe that the kindergarten is of distinct worth only to the phlegmatic child, and that it is of no value whatever to the great majority of American children, who, because of home conditions and city life, are already inclined to be nervous, and therefore should be left strictly alone until the age of six or seven, when they enter the primary grade.

These various questions and contentions cannot be answered until a very careful examination is made of both the physical and the mental condition of children having had kindergarten training and of those not having had such training. A careful investigation of this kind, carried on for eight or ten years, will do much to confirm or refute the charges that have been made against the value of kindergarten training.

But this paper will be confined mainly to a discussion of the effect of kindergarten training upon the future progress of the children in the grades, since to attempt a wider and deeper analysis at this time would be

quite impossible. Very recently, Dr. Leonard P. Ayres, of the Russell Sage Foundation, examined the school records of sixteen thousand eighth-grade graduates of the public schools of New York City. His conclusions were to the effect that he found no appreciable difference between the rate of progress of those with and those without kindergarten training. So far as he could discover, a child entering the kindergarten at the age of four and a half or five years and receiving instruction there until the age of six found the work of the grades no easier than did the child of six who went directly from home to the first grade where he received formal instruction for the first time in his life.

Before the Kindergarten Department of the National Education Association last year, Superintendent Mary D. Bradford, of the Kenosha, Wis., schools, read a paper entitled, "The Kindergarten and Its Relation to Retardation." Superintendent Bradford made a careful study of the progress and work of 1,663 pupils, which included all those who might have attended the public kindergartens established in Kenosha six or seven years ago. First of all, she discovered that 925 of these 1,663 had attended kindergarten and that these children formed 60 per cent of the bright group. Furthermore, she discovered "that all the children with kindergarten training, wherever found in the first five grades, have an average age which is 8.4 months below that of all the children without such training."

Somewhere else in her paper, Superintendent Bradford states that 11.8 per cent of the public-school children under her charge were born across the ocean, and 52 per cent of the school children of her city come from homes where one or both parents are foreign born. In many of these homes only a foreign language is spoken, and she points out that the kindergarten serves another purpose in giving little children at an early age a command of the English language.

In the light of this it seems that the statistics obtained by Superintendent Bradford may be affected by the fact that a fairly good group of children entering the lower grades of the Kenosha schools have still to acquire the use of the spoken English and therefore part of the retardation found among non-kindergarten children is not due to their failure to get kindergarten training but to their failure to understand the English language. Because of this fact, the conclusions she has reached may have to be modified.

I make this point because at my suggestion Miss Mary D. Hill and Miss Louise Dietz, kindergarten supervisor and primary supervisor, respectively, in the Louisville public schools, tried to discover what effect kindergarten training had in our city on the later school progress of children in comparison with the progress made by children without such training. These facts were obtained from the 8A pupils—those that completed the work of the grades in June, 1913. Very frankly I must say that our

investigation bears out the conclusions reached by Doctor Ayres, as the following tables will show:

TABLE A

SUMMARY OF QUESTIONNAIRE SENT TO THE 8A-GRADE PUPILS WITH KINDERGARTEN TRAINING

	Girls	Boys	Total	Kindergarten Averages
Eighth-grade pupils having had kindergarten training	82	76	158	
Years in kindergarten	103 years	107½ years	210½ years	Average number years in kindergarten, 1.33 years
Age at conclusion of eighth year	1,169 years 5 months	1,082 years	2,251 years 5 months	Average age at conclusion of eighth grade, 14.25 years
Age of entering first grade	520 years	472 years	992 years	Average age entering first grade, 6.277 years
Number half-grades skipped	51	63	114	Average number half-grades skipped, 0.721
Number half-grades retarded	19	19	38	Average number half-grades retarded, 0.24
Total number of years in school	628.8 years	589 years	1,217.8 years	Average number years in school, 7.706 years

All papers marked B were discarded. Total apparent 8A, 763. Of this number 65 were thrown out on account of conflicting statements. This left 698 for the whole report—both kindergarten and non-kindergarten.

TABLE B

SUMMARY OF QUESTIONNAIRE SENT TO THE 8A-GRADE PUPILS WITHOUT KINDERGARTEN TRAINING

	Girls	Boys	Total	Non-kindergarten Averages
Eighth-grade pupils having had no kindergarten training	307	233	540	
Age at conclusion of eighth grade	4,276 years 6 months	3,098 years 2 months	7,374 years 8 months	13.635 years
Age entering first grade	1,902 years 5 months	1,040 years 7 months	2,943 years	5.45 years
Number half-grades skipped	169	96	265	.49
Number half-grades retarded	72	103	175	.324
Total number years in school	2,307 years 9 months	1,910 years 8 months	4,218 years 5 months	7.811

Table A shows that 158 of the 698 children in the 8A grade had had kindergarten training, with an average of one and one-third years of instruction. By accident a number of 8B pupils—those in the first half of the eighth grade—were included. However, the conclusions have not been

invalidated. A comparison of Tables A and B shows that the average age for completion of the eighth grade by those having had kindergarten training was 14.25 years, while those without such training completed the eighth grade with an average age of but 13.64 years. This difference can be explained when we find that the non-kindergartners entered the first grade at an average age of 5.45 years, while those receiving kindergarten training averaged 6.27 years. But we must admit that we are still puzzled to know why this special training of the kindergarten children and their added maturity have not been evidenced in more rapid promotions.

During the past few months, Misses Dietz and Hill asked the teachers of the children in grade B—those enrolled for the first five months of the first grade—to rate their children in three groups, slow, average, and strong, and then discover how many in each group had received and how many had not received kindergarten training. Their reports have been compiled and presented in Table C, given below:

TABLE C

Giving facts about 965 pupils enrolled in 1B grade of the Louisville public schools. These pupils are divided into three groups according to ability, indicating in each instance the number that have received kindergarten training.

SLOW	272	Number having kindergarten training	62
		Percentage having kindergarten training	22.7 per cent
		Number without kindergarten training	210
		Percentage without kindergarten training	77.2 per cent
			272
AVERAGE	398	Number having kindergarten training	126
		Percentage having kindergarten training	31.6 per cent
		Number without kindergarten training	272
		Percentage without kindergarten training	68.3 per cent
			398
STRONG	295	Number having kindergarten training	91
		Percentage having kindergarten training	30.8 per cent
		Number without kindergarten training	204
		Percentage without kindergarten training	69.1 per cent
			295
TOTAL	965		

At a glance we discover that 272 of the 965 are rated as slow and that 62 of this number, or 22.7 per cent, have had kindergarten training. Those estimated as average or fair enroll 398 of whom 126, or 31.6 per cent, have received training in a kindergarten. In the strong group are 295 with 91, or 30.8 per cent, having had kindergarten instruction. This analysis seems to show that the only appreciable effect the kindergarten work has had was to reduce by 8 or 9 per cent the number that otherwise would be found in the slow group.

This again seems to offer additional evidence that the work of the kindergarten does not properly function; something is wrong with either the kindergarten or the primary grades. This assertion is borne out when we

examine the replies that came in from the 1B primary teachers concerning pupils that had received kindergarten training. For instance, three-fourths of these teachers stated that kindergarten children are more obedient and show more self-control; 68 per cent report that these children are capable of more concentration and that they master the mechanics of reading more easily than do those children that have had no kindergarten training. From 75 to 93 per cent of these teachers state that kindergarten children master the content of reading more quickly, they do industrial work more easily, they write more readily, they have increased power of visualization, and they have more power of leadership.

What now is the matter? Certainly the primary teachers of Louisville are favorably inclined toward the work of the kindergarten. But, upon the other hand, our figures show conclusively that the kindergarten children in our city have not gained time as a result of such instruction. In fact, it would seem that a child actually lost every month that he spent in the kindergarten after he had attained the age of six. Late entry because of kindergarten work was just as disastrous from the standpoint of school progress as if late entry had been caused by poor health, or by a parent who believed a child should not enter the primary grade until the age of six and a half or seven years.

Why has not the kindergarten instruction functioned and affected the school progress of the child? Miss Dietz, the primary supervisor of the Louisville schools, has this explanation to offer:

> During the second term of the school year 1912–13, out of 965 children in grade 1B, only thirty-eight were promoted to the 1A grade in less than five months. Of these only fifteen were kindergarten children and twenty-three were non-kindergarten. It is at once evident that, altho we are using the group system in our primary grades, we have not yet learned to use the advantage that the group system gives—flexibility.
>
> The fact that there were more non-kindergarten children promoted than those who have had the training is easily explained. Primary teachers are, as a rule, loathe to push children unless the latter are over-age. The twenty-three non-kindergarten children, I am sure, are, in nearly every case, over-age foreign children, or those who came from the outside and, with assistance, made up back work.

In addition to the information given in the questionnaire, the teachers of the 1B grade children were questioned by Miss Dietz. These teachers, following the custom of former years, did not attempt to make a separate group of those children who had received kindergarten training. The grouping of the children in the grade was made without regard to this training, tho a number of the teachers stated that the kindergarten children would eventually work themselves into the strong group.

Now the figures we have obtained from the teachers of the 1B grade children indicate that this assumption is not correct. Possibly the reason is because these kindergarten children have not received the proper training; possibly the reason lies deeper. The explanation offered by Miss Dietz is that "the central thought of the kindergarten has been childlike activity

while too often with the primary room it has been the formal mastery of the symbols of learning."

In this connection it might be well to consider the conclusions reached by Dr. Frank McMurry as found in his recent book, entitled, *Elementary School Standards*. This book, as we know, was based on the New York City school inquiry, and in it Dr. McMurry devotes some time to a discussion of the unification of kindergarten and primary schools. In testing the quality of instruction in the New York schools, he applies the following four standards:

1. Does the instruction develop motive in the pupils?
2. Does it develop power to estimate values?
3. Does it develop power to organize and systematize?
4. Does it make provision for the exercise of initiative?

Dr. McMurry concludes by saying:

> The kindergarten curriculum, as a rule, is so plainly determined by reference to the chief aims of a school, as expressed in the four standards proposed, that it greatly aids the kind of classroom instruction that can meet those standards.

I may call your attention to the fact that Dr. McMurry asserts (p. 69) that the kindergarten in New York City stood the test decidedly better than did the elementary grades.

In this connection permit me to quote a few sentences from Miss Mary D. Hill, supervisor of kindergartens in the Louisville public schools:

> Because the kindergarten theory was developed largely outside of the schools, it has the advantage of freedom to break a new pathway in educational principles and practices—self-activity, education related to life and to those interests and experiences of the child which are of value. It has also enabled the teacher to develop the training of the social relations within the group—that is, ethical training in the deed itself. The kindergarten movement has done much to emphasize the fact that education is growth and therefore information is to be considered not an end in itself, but simply as a means to growth.
>
> On the other hand, isolation from the school has been too long continued, and the progressive kindergarten leaders have been asking for constructive criticism from other educators and specialists. If such assistance can be given and we are willing to make the necessary changes in our curriculum and methods, certainly the kindergarten training will function thruout the grades.

In the light of these statements and before we enter into a condemnation of the kindergarten, would it not be well for us to attempt a reconstruction of the work of the primary grades in order that we may see if the fault after all does not lie in bad organization and in the failure to utilize the true values of the kindergarten training? At present the supervisors of the kindergartens and the primary grades in Louisville are trying to overcome the difficulty thru the following means:

1. Bulletins showing the central thought of each—the kindergarten and the primary grades.
2. Small group conferences of kindergarten and primary teachers.
3. Instruction of primary teachers in the most approved kindergarten methods.

4. Placing the children who have kindergarten training in a separate group in the 1B class.

5. Urging the primary teacher to use any contribution of the kindergarten child.

6. Encouraging the primary teacher to keep a record of the strong and weak points of the kindergarten children in order that this information may be used for the benefit of both kindergarten and primary grades.

In this paper I have given the results of Dr. Ayres's investigation, the conclusions as made by Superintendent Mary D. Bradford, and the statistics we obtained in the Louisville public schools. In the main, these figures seem to be against the work of the kindergarten. Upon the other hand, we have the conclusions of Dr. Frank McMurry as to the failure of the primary grades to utilize the instruction of the modern kindergarten. He is convinced that the work of the kindergarten will persist and will function most effectively in a well-organized primary school and therefore that the kindergarten child will be enabled to make more rapid and satisfactory progress in the grades.

At present, as we can see, the question has not been settled. However, with the establishment of more exact measurements to test both physical and mental conditions and changes, it will soon be possible for us to determine the value of the kindergarten as a part of the public-school system, and we can then at once make the necessary changes in curriculum and methods of both the kindergarten and the primary work, which will insure the greatest benefit to the children entering our schools.

SOME EXPERIMENTS IN ELEMENTARY-SCHOOL ORGANIZATION

SAMUEL W. BROWN, STATE NORMAL SCHOOL, SAN FRANCISCO, CAL.

There are three problems in elementary education today which are demanding solution:

1. The problem of the curriculum.
2. The problem of classification.
3. The problem of expert instruction.

I propose to discuss each of these very briefly in the light of some attempts at their solution with which I have been connected for some ten years past—during the first seven years as supervising principal of a ward school, and during the last three years as director and supervisor in state normal, elementary, and secondary training schools.

1. *The problem of the curriculum.*—I have assumed that the preparation for the duties of enlightened American citizenship is the first, the fundamental purpose of the elementary public school. All that knowledge of a non-technical nature with which a reasonably well-adjusted citizen in an American state is equipped; all those sentiments and standards, all those social and personal habits, all those ideals, appreciations, and contempts,

which mark the desirable citizen, the man of good repute in our midst; all those tools for the acquisition and expression of experience as are of common usefulness; and such ordinary facility in and habituation to the use of these tools as may reasonably be expected; these, the elementary public school, whatever else it does or does not do, must impart unto all its pupils or insure that they possess on leaving it.

Since this training for citizenship is to be common to all, our minimum standard of attainment therein can be neither very high nor very broad. It must be such as all non-defective children, within a reasonable length of time, say prior to the fifteenth year, can reach. There should be excluded from this common minimum curriculum all that is in any way special in its nature. Preparation for high school has no place therein, for only a fraction of our boys and girls will ever go to high school. Neither should we allow the elements of any particular trade, calling, or profession, nor anything aiming at the earning of a livelihood to have place therein, because these violate our fundamental canon that only that which is of common value to all as citizens of the state shall be imparted to or required of all in common.

A second legitimate function of the elementary school is to discover and train particular, individual abilities and talents, and to minister to particular, individual deficiencies and needs. Under this function fall preparation for high school, preparation for vocational life, the education of defectives, and the training and culture of special artistic and constructive talents. While under the first function, the preparation of citizens, a constant, universal, uniform, minimum attainment should be required of all, here, the widest possible range of subject-matter and training, the richest possible curriculum, varying if necessary from term to term, so as to insure greater width, should be offered, and the greatest possible adaptation of requirements to individual needs and abilities consistent with group instruction should be provided.

A failure to recognize this distinction between common and special values in educational material and training has led to the present condition of an overcrowded and conjested curriculum, required in common of all children, with the inevitable result of inadequate treatment and a widespread dissatisfaction with educational conditions and results. It is the recognition of the importance and of the necessity of such a division of the curriculum which lies at the bottom of all I have to say to you today. This having been granted, all the rest follows of logical and practical necessity.

None of the educational aims which I have named are new. They have met with general recognition, but little differentiation of the elementary curriculum in consequence of these varying aims has been attempted. All must take the full course. The ordinary procedure has been, when a new subject or new topic in an old subject has arisen and demonstrated or proclaimed its worth, to put it in on top of the already crowded curriculum

and require all to take it. The present curriculum is marked, therefore, by a variety of aims, varying from common to all degrees of special, and these two types of aims are found existing side by side in many of the subjects now required in common of all, while other subjects totally special in their natures are likewise required of all as if they were of common value.

Because of these facts there is needed not only a separation of those subjects wholly special from those which are in part of common value, but also a reorganization of those subjects which contain elements of common value so as to separate that which is common from that which is special. In undertaking such a reorganization I have found likewise much material which is neither of special nor of common value but which has held its place merely from traditional, pedantic, sentimental, or excessively logical considerations.

Aside from these major considerations of common and special there are three canons which I have found useful in determining the reorganization of the educational material and practices so torn asunder into courses, as I have termed them, or units of instruction.

The first of these canons is unity. A demand for two or more kinds of ability should not be made in a single course. To violate this canon means that, in grading a pupil in his work in a single course, you must average two or more unlike abilities, the presence of one of which is no evidence whatever that the others will be present. This results in low standards and inefficiency in the abilities which are raised from their low gradings by reason of the high ratings of other abilities being averaged with them. The other alternative is to retain the pupil in the course until the ability in which he is lowest shall have been strengthened to the point of passing. This results in unjust and excessive and unnecessary retardation, and is disastrous to the pupil's interest and effort. Courses in English furnish a good illustration of the violation of this canon. Frequently they make such diverse demands as skill in composition and literary appreciation. As educators we must insist as far as possible upon this separation of diverse elements in the interest of justice to the child and of efficiency in instruction.

A second canon is brevity. A short course is preferable to a long one; a half-year course is preferable to a year; a quarter-year to a half-year. For many courses even a shorter time basis of organization is to be preferred. Brevity of the course lends itself readily to thoroness therein, for a child who has not reached the standard of thoroness therein can be held till he does with less loss of time. When a particular course is used for obtaining a diagnosis, to determine what are the educational needs of certain children, or what are their special abilities, a short course will serve the purpose, frequently, as well as a longer one. Closer grading is made possible by means of short courses, thereby lightening the teacher's task by reason of the greater evenness of ability or advancement on the part of the indi-

viduals of the class. A single child of marked deficiency in a class divides a teacher's energy by two.

The third canon is that of independence, non-sequence of courses within a given subject. I realize the limitations to the application of this canon. There are some subjects in which the element of sequence between courses plays a large part. But in all subjects we have insisted upon a prescribed order of sequence more than is necessary or desirable. The fundamental operations of number—addition, substraction, multiplication, and division—have been very commonly taught in a fixed order of sequence, that in which I have named them. Teaching them separately agrees with my first canon, but the order of sequence may be varied to this extent, that either multiplication or subtraction may be taught second or third in order. Addition of course should be taught first and division last. In geography, history, and English still greater deviations from any fixed order of sequence may be allowed, resulting in less rigidity and more flexibility in the curriculum, to the decided benefit of the child.

Theoretically the minimum curriculum required in common of all non-defective children should represent from two-thirds to three-fourths of their work during the first six years of their school life. Actually, such a curriculum will require all but a small number of children from six to eight years to complete. From the very first year till the completion of the required, common minimum, from one-fourth to one-third as much work in addition thereto should be required of each child. This would add nothing to the total time which it would take him to complete the required minimum. This additional work should minister to the special physical, linguistic, social, future educational, and vocational needs of each child, which he has in common with enough of his fellows to warrant the organization of groups for the purpose. It should aim too at determining and developing any special abilities which he may possess. There should be no election of courses on his part, but the principal of the school in determining the educational prescription for each child should take into account the factors of the child's interests and the wishes of his parents to the extent that these do not conflict with his own and his assistants' findings with regard to the child.

2. *The problem of classification.*—The differentiated curriculum and course organization of subject-matter just described presupposes some other system of classification or grouping of pupils for instruction than that afforded by the graded school, which assumes, in the first place, that all should take the same curriculum, and, in the second place, that any non-defective child with due diligence will progress with equal rapidity in each of four, five, six, or more subjects. That a portion of each child's curriculum should be determined by his individual needs or abilities I have already discussed. Now as to the matter of equal progress in several subjects.

For several years I have been working with children classified on a subject or course basis, extending from the lowest primary year thru the secondary school, covering the usual range of required subjects, and I am convinced that nowhere within that range is it possible to have more than a very small fraction of the children, if any, go forward, all subjects abreast, without restraining each child from making the progress of which he is capable in some one or more of these subjects, or without concealing, by an average of high and low subject gradings, deficiencies in certain subjects which should not permit him to go forward in these subjects.

I have recently checked over about 1,750 programs of over 1,000 pupils representing for each pupil from one to three half-years of work in the subjects of arithmetic, history, geography, grammar, composition, literature, and spelling, from two schools organized on a subject basis. The children were doing work corresponding to that of the low-fifth to the high-eighth grades inclusive. These programs showed that 25.9 per cent of the pupils enrolled at the time they were secured were taking all of the subjects named in what would correspond to the same grade or half-year. This includes those just entering the low-fifth grade work where all were started evenly. Of the total number, 30.5 per cent were taking their work in two different half-years of advancement; with 24.6 per cent there was a range of three half-years of advancement from their lowest to their highest subjects; 12.9 per cent of them covered a range of four half-years; while with 4.8 per cent there was a range of five half-years. The gradings in a third school organized on a subject basis from the third year to the eighth reveals approximately the same state of irregularity. In one school from whose primary years I have partial and unsatisfactory records only, a considerable amount of irregularity is manifested in the second, third, and fourth years, but just how much it is I am as yet unable to state.

If such evidence as I have means anything, it seems to mean that irregularity, rather than regularity, of advancement in the different subjects of the common school curriculum is what may normally be expected if children are classified by subjects rather than by averages of several subjects.

I submit that any child ought to be allowed to progress in any subject as rapidly as his abilities will allow and equally ought he to be allowed to prolong his studies in any subject which is especially difficult for him until he shall have mastered it. No child should be advanced in any required subject until he has mastered it, no matter what his standing may be in several other subjects. No child should be held to the drudgery of repeating subjects already mastered simply because he has failed to master some other or all other subjects.

3. *The problem of expert instruction.*—A departmental organization of the teaching force is necessary for handling such a differentiated curriculum as I have described. Equally as necessary is a departmental organization for handling classification on a subject basis. Departmental teaching is

coming to be a common feature of grammar-grade instruction in urban schools because of the higher grade of instruction afforded thereby. I have employed it in all years from the lowest primary up and have found it not only a satisfactory means of securing expert instruction in every subject of the curriculum, but a means too of a material reduction in the salary cost from that of a corps of grade teachers supplemented by several special teachers. The saving has been brought about by eliminating special teachers, substituting therefor teachers within the regular corps, by evening up the time all teachers in the school shall be on duty, and by consolidating several classes for practice or study in a common hall under one or two teachers. Where home study is eliminated and all preparation of lessons is done within school hours, which I consider a desirable feature, this last item represents a considerable saving. Below the fifth year, approximately, consolidation of several classes for gymnastic or play purposes takes the place of consolidation for study purposes. Consolidation of several classes for chorus music under a single teacher can also be carried out, leaving several teachers free for other assignment within the school. The savings thus effected can very profitably be employed in extending the range of the curriculum and securing additional departmental instructors and equipment.

Some will indorse what I have said with regard to the upper grammar grades only. It is only from working with little children that I have become convinced of its applicability to them. They seem to be as different in their interests and abilities as are their older brothers and sisters. The régime of the present elementary school is just as little suited to the former as to the latter. I realize that the present situation is more acute with regard to the adolescents and the immediately pre-adolescents, but only so because of their ability to rebel against manifest injustice and the fact that over 50 per cent are actually doing so in failing to complete the elementary school. But the unsuitedness of the present elementary school régime is none the less true with regard to those of fewer years and less mature minds and bodies whom the law compels to be submissive and attend. A curriculum adaptable to their needs, a classification suitable to the best development and nurture of their several abilities and natures, and the most expert and artistic and consecrated teaching ability obtainable are just as much their rightful heritage as they are of their older brothers and sisters who are about to finish the elementary school.

Ill does it behoove any school man to proclaim that he cannot make such a system work. An enriched curriculum and thoroness in the common elementary school subjects are being demanded of us by social forces which are irresistible. The graded school with its narrow, uniform curriculum is proving inadequate for the task committed to it by the American people. Differentiation of the curriculum seems to be a necessity. I have attempted to outline something of a reorganization having this in view, which has been tested and is being tested, and it works. I commend it to you.

SOME ELIMINATIONS IN THE CONTENT OF ARITHMETIC AS A FACTOR IN THE ECONOMY OF TIME

WALTER A. JESSUP, DIRECTOR, SCHOOL OF EDUCATION, STATE UNIVERSITY OF IOWA, IOWA CITY, IOWA

In our attempt to bring about economy of time in the administration of a particular subject in the curriculum, it is important to know something about the degree of uniformity which exists in the present scheme of administration. If common experience, covering a wide range of places and conditions, has resulted in certain fixed conclusions which establish definite standards in time and energy to be expended, we will find it difficult to carry out any policy which involves a change. However, if we find that experience has not resulted in fixed standards of time or results it will be relatively easy to effect change.

Mr. Van Houten, a graduate student in the State University of Iowa, during the past year has been investigating the variations in certain administrative details in the field of arithmetic. For this study, 150 school systems were selected in such a way as to represent the different sections of the country and the different-sized cities.

Variations in time given to arithmetic.—The material was secured from the published reports supplemented by definite data furnished by the school superintendents, so that there is reason to believe that the information is reliable. The total time per week given to recitation work in arithmetic thruout the seven, eight, or nine grades of the school was tabulated and arranged in the form of a frequency table given below:

DISTRIBUTION OF TOTAL RECITATION TIME PER WEEK GIVEN THRUOUT THE GRADES IN 150 DIFFERENT SCHOOL SYSTEMS

Number of Minutes per Week	Number of Cases
601– 700	4
701– 800	13
801– 900	13
901–1000	15
1001–1100	6
1101–1200	14
1201–1300	6
1301–1400	13
1401–1500	7
1501–1600	4
1601–1700	12
1701–1800	15
1801–1900	4
1901–2000	6
2001–2100	6
2101–2200	2
2201–2300	6
2301–2400	2
2401–2500	1
3001–3100	1
Total	150

Median, 1,338 minutes per week

Average deviation, 407.24 minutes per week

The fact that the average deviation is so large (about four hundred minutes) is a good measure of the variation in practice. However when it is realized that one-fourth of the cities are spending a total of less than 950 minutes per week, while another fourth of the cities are spending over 1,750 minutes, it is clearly seen that there is no fixed or uniform custom in this particular. If one-fourth of these cities are able to secure satisfactory results in arithmetic with an expenditure of 950 minutes or less, does it not seem that the cities expending twice as much should question their work with a view to finding the cause?

Variation in percentage of time given to arithmetic.—The same material was tabulated and distributed so as to show the distribution of the percentage of total recitation time given to arithmetic, with the following result:

VARIATION IN PERCENTAGE OF TOTAL RECITATION TIME GIVEN TO ARITHMETIC THRUOUT THE GRADES IN 150 CITIES

Percentage of Time per Week	Number of Cases
6.1– 7	10
7.1– 8	14
8.1– 9	10
9.1–10	10
10.1–11	13
11.1–12	11
12.1–13	8
13.1–14	11
14.1–15	5
15.1–16	14
16.1–17	8
17.1–18	13
18.1–19	4
19.1–20	8
20.1–21	5
21.1–22	0
22.1–23	2
28.1–29	1
Total	147

Median, 11.7 per cent
Average deviation, 3.682 per cent

Here again the variation is seen to range from 6 per cent to 29 per cent. If one-fifth of the cities are able to secure satisfactory results by devoting 8.5 per cent or less of their time to arithmetic, are we not justified in making an inquiry into the reason why another fifth of the cities devote twice as large a percentage of their total time to arithmetic?

Variations from grade to grade in distribution of time.—When the material is analyzed for the purpose of bringing out the time distribution of the different grades, a new set of variations is revealed. The number of minutes per week given to arithmetic in the various grades varies from no time at all to 300 minutes. The complete distribution table is as follows:

VARIATION IN NUMBER OF MINUTES PER WEEK DEVOTED TO RECITATION IN ARITHMETIC IN THE VARIOUS GRADES IN THE DIFFERENT CITIES

Number Minutes per Week	1	2	3	4	5	6	7	8	9
0	39	6	1	.....	.....	.....	.....	.....	.....
0– 25	39	6	1	.....	.....	.....	.....	.....	.....
26– 50	26	6	1	.....	.....	.....	.....	.....	.....
51– 75	31	28	12	.....	.....	.....	.....	.....	.....
76–100	19	24	22	25	13	7	2	2	.....
101–125	13	16	20	21	23	19	20	17	.....
126–150	11	28	19	21	31	34	34	30	1
151–175	1	5	7	3	3	6	6	6	1
176–200	6	13	23	24½	20	22	22	28	1
201–225	2	101	10	9	8	9	13	13	4
226–250	1	8	16	20	21	25	33	19	.....
251–275	.....	.....	3	6	8	6	8	6	.....
276–300	2	7	13	18	18	18	18	21	2
301–325	.....	.....	1	.....	.....	.....	1	1	.....
326–350	.....	1	.....	1	1	1	2	2	.....
351–375	.....	.....	.....	.....	1	.....	.....	2	.....
376–400	.....	.....	1	.....	.....	2	1	.....	.....
426–450	.....	.....	.....	1	1	.....	.....	.....	.....
Median	60	117	149	179	180	184	191	194	208
Average deviation	42	55	61	61	60	55	54	56	33

When thus analyzed the same variation appears in each grade; one-fourth of the schools offer less than 25 minutes per day in the fourth grade, while one-fourth spend more than twice that much per day. Similar contrasts are to be noted in the other grades.

Variation in maximum emphasis.—Not only is there a wide variation in the policy of the different cities as to the amount of time given from grade to grade and to the subject as a whole; but there is also wide variation in the grades which receive the maximum amount of attention, so far as arithmetic is concerned. This is shown in the following table:

DISTRIBUTION SHOWING GRADES IN WHICH MOST TIME IS GIVEN TO ARITHMETIC

Grade	Number of Cities
1	1
2	5
3	26
4	26
5	24
6	23
7	26
8	16
9	1
Total	148

Here it is seen that over one-third of the cities give the maximum amount of time to arithmetic below the fifth grade; another third give the maximum amount of time to arithmetic in the upper grades.

Present condition chaotic.—From this study of the variation in time, and the distribution of the time from grade to grade in the different cities, one is led to believe that no uniformity or regularity exists in this particular. Consequently there is much reason to believe that this is a favorable field for readjustment. In this connection it should be noted that the investigations of the results attained in arithmetic by Rice and Stone brought out the fact that there was not a high correlation between time expended and results attained. In view of these investigations it would seem that it is not only possible to make some definite readjustment in the time distribution for arithmetic but it is surely highly desirable if the school is to be administered from the standpoint of economy.

Eliminations.—An analysis of the material specifically eliminated in the courses of study in arithmetic in these 150 cities brought out the following information:

DISTRIBUTION OF TOPICS SPECIFICALLY MENTIONED AS BEING ELIMINATED

Name of Topics	Number of Cases
Cube root	29
Compound proportion	11
Troy weight	10
Apothecaries' weight	8
Metric system	8
Partial payments	8
Compound interest	7
All interest except 6 per cent	6
Domestic exchange	5
Least common multiple and greatest common divisor	5
Foreign exchange	5
Foreign money	5
Partitive proportion	5
Longitude and time	4
Present worth	4
True discount	4
Stocks and bonds	4
Scattering topics mentioned three times	4
Scattering topics mentioned two times	14
Scattering topics mentioned once	38

From the foregoing table it is seen that there are 206 cases of specific eliminations in the list, distributed over seventy-three different topics. With the exception of cube root there seems to be practically no agreement as to just what topics to eliminate. The fact that there are so many instances of elimination, showing such a wide variation as to actual topics,

should be taken into consideration in any general plan for elimination of material as a factor in the economy of time. School men are clearly conscious of the need of elimination. Experimentation is going on in many different directions. If adequate means of testing the results of these experimentations were available, we might have a definite program of elimination established.

The fact that such wide variation exists in time distribution and topics eliminated in the 150 cities studied is a matter of encouragement in connection with any propaganda for the economy of time in the administration of arithmetic.

DEPARTMENT OF SECONDARY EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—M. H. Stuart, principal, Manual Training High School.....Indianapolis, Ind.
Vice-President—Ira M. Allen, principal of high school.....Wichita, Kans.
Secretary—William C. Hill, principal, Central High School.....Springfield, Mass.

FIRST SESSION—Wednesday Afternoon, July 9, 1913

The meeting was called to order in Assembly Hall at 2:30 P.M., by President M. H. Stuart.

M. H. Stuart delivered the president's address, "The Cosmopolitan High School in Its Relation to College Entrance."

James F. Hosic, head of the English Department, Chicago Normal College, Chicago, Ill., read a paper on "Effective Ways of Securing Co-operation of All Departments in the Teaching of English Composition."

A paper on "High-School Courses" was presented by Milton C. Potter, superintendent of schools, St. Paul, Minn.

The meeting then adjourned.

SECOND SESSION—Thursday Forenoon, July 10, 1913

The members of the department met in round-table conferences at 9:00 A.M. to consider the various reports of the subcommittees of the Committee on Articulation of High Schools and Colleges as follows:

English—Leader, James F. Hosic, head of English Department, Chicago Normal College, Chicago, Ill.

Ancient Languages—Leader, Walter E. Foster, Stuyvesant High School, New York, N. Y.

Natural Science—Leader, William Orr, deputy commissioner of education, Boston, Mass.

Social Science—Leader, Thomas J. Jones, specialist, Bureau of Education, Washington, D.C.

Household Economics—Leader, Amy L. Daniels, University of Missouri, Columbia, Mo.

Business—Leader, A. L. Pugh, High School of Commerce, New York, N.Y.

These preliminary reports, together with those given on Friday forenoon, will be printed in a bulletin by the United States Bureau of Education, entitled "Preliminary Statements on the Reorganization of Secondary Education."

After the reading of the reports the meeting adjourned.

THIRD SESSION—Thursday Afternoon, July 10, 1913

The department met in joint session with the Departments of Science Instruction and Manual Training and Art Education and was called to order in Assembly Hall, at 2:30 P.M., by J. G. Collicott, superintendent of schools, Indianapolis, Ind.

The following program was presented:

"What the Schools Can Do to Meet the Demands of Both Industry and General Science"—Ernest O. Holland, superintendent of schools, Louisville, Ky. (For this paper see Department of Science Instruction.)

"How Far Should Both Academic and Manual-Arts Courses in the High Schools Be Bent to Meet the Needs of Specific Vocations?"—William B. Owen, principal, Chicago Normal School, Chicago, Ill.

"Report of the Committee on the Improvement of Physics Teaching"—J. A. Randall, department of physics, Pratt Institute, Brooklyn, N.Y. (For this paper see Department of Science Instruction.)

The meeting then adjourned.

FOURTH SESSION—Friday Forenoon, July 11, 1913

The department met in round-table conferences to continue the reports by the subcommittees of the Committee on Articulation of High Schools and Colleges.

The meeting was called to order at 9:30 A.M.

Before the reports were given, Leida H. Mills, teacher of Latin, high school, Wichita, Kans., read a paper on "What Constitutes a Good High-School Administration from the Standpoint of a Teacher."

The subcommittees reported as follows:

Modern Languages—Leader, William B. Snow, English High School, Boston, Mass.

Mechanic Arts—Leader, R. W. Selvidge, professor of manual arts, School of Education, University of Missouri, Columbia, Mo.

Music—Leader, Will Earhart, director of music, public schools, Pittsburgh, Pa.

Agriculture—Leader, Ashley Van Storm, professor of agricultural education, University of Minnesota, Minneapolis, Minn.

After the adjournment of the round-table conferences, Clarence D. Kingsley, high-school inspector, Massachusetts Board of Education, Boston, Mass., presented the third Report of the Committee on Articulation of High Schools and Colleges.

The meeting then adjourned.

FIFTH SESSION—Friday Afternoon, July 11, 1913

The department was called to order in Assembly Hall at 2:30 P.M.

The chairman of the nominating committee reported the following nominations:

For *President*—Oliver S. Westcott, principal, Waller High School, Chicago, Ill.
For *Vice-President*—I. M. Allen, principal of high school, Wichita, Kans.
For *Secretary*—E. C. Roberts, principal of high school, Everett, Wash.

The report of the Committee on Nominations was approved and the officers unanimously elected.

The following papers were then presented:

"Tangible Ways of Using a Community in Secondary Education"—F. D. Thomson, principal of high school, Springfield, Ill.

"Our High School and Its Girls"—Susan M. Dorsey, assistant superintendent of schools, Los Angeles, Cal.

"The Place of the High School in Our System of Education"—P. P. Claxton, United States commissioner of education, Washington, D.C.

The meeting then adjourned.

Ira M. Allen, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

THE COSMOPOLITAN HIGH SCHOOL IN ITS RELATION TO COLLEGE ENTRANCE

M. H. STUART, PRINCIPAL, MANUAL TRAINING HIGH SCHOOL, INDIANAPOLIS, IND.

Our high schools are in the first flush of self-direction. We have signed the Declaration of Independence. The colleges and universities constitute our educational mother-country, to be sure. We have been educated in their kingdom; have been taught their languages—English, Greek, and Latin. But so great were the burdens which they laid upon us that it became our duty to declare that we, the high schools of the United States, are, and of right ought to be, free and independent institutions. A recital of our wrongs is convincing as to the justice of our cause. They taxed our time by requiring us to learn many languages which we did not use; they deprived us of initiative by prescribing exactly what we should undertake; they denied us the use of our own originality by declining to recognize our methods; they deprived our children of the power of choice by limiting the list of subjects they should take; they discriminated against many industrial occupations necessary to the welfare of our people; and finally, they disowned us as their educational kith and kin by imposing on our children great and unnecessary burdens when immigrating into their kingdom. We have, therefore, somewhat tardily, begun to rule our own territory.

It is the first duty of the high school to give each pupil an insight into the form of service in which he is most interested. This is to enable him to do two things: first, to choose with intelligence which phase he wishes to adopt as his own; second, to acquire a sympathetic insight into the lives of his neighbors. A cosmopolitan high school is a high school which does not shirk this duty, but which teaches side by side English, mathematics, history, cooking, sewing, art, agriculture, Latin, mechanical drawing, music, and regards them all as on a level. That person or institution which calls part of these essential, and the rest "fads and frills," has not yet caught a glimpse of the meaning of universal education.

As long as our high schools limited their work to a certain narrow curriculum, entrance into higher institutions offered few difficulties. But now that the breadth of our courses begins to approximate the life-interests of given communities, articulation with colleges and universities becomes a problem. There are some high-school men who pose as friends of "the masses"—whoever that may be—and regard that the few who go on to college are a negligible quantity. There are some college men who assume an equally independent attitude, and, under guise of "preserving a high standard of scholarship," limit that same scholarship to a few subjects far

from universal in their appeal. But the principle at stake is entirely too great to be carelessly disregarded. It has been the one peculiar glory of our system of education that the road is open from the kindergarten to the university. This is the most tangible evidence that we are democratic. The number of boys and girls who actually go to college by no means tells the tale of those who are inspired by the possibility of so doing. Our whole student body does more spirited high-school work because they know that if they so desire they may continue in college or university. A closed gate ahead takes zest from any journey. We are waking up to the fact that we must know the vocations possible to our boys and girls. For exactly the same reason we must continue to know what higher institutions they may enter.

We are intensely concerned, therefore, in entering into joint sympathetic study of the problems of adolescent education with those higher institutions which count the individuality of boys and girls as of more value than their own courses of study. Happily, there is an increasing number of such open-minded colleges and universities. It is only fair to them that we high-school people should set forth, as clearly as we know how, just what it is possible for us to do, and that we should ask of them such entrance requirements as we believe our boys and girls can meet to greatest advantage. We believe they will readily grant that after four years of close association we can judge better than they what our pupils may justly be expected to know.

Here are some of the points in question. First, we cannot do five years' work in four. That might sound self-evident, but indeed it is a truth on which we ourselves have scarcely begun to act. We are given pupils of fourteen years or thereabouts. If a class of them wishes to take German, for instance, we can direct their growth in that direction for four years, but it depends on their ability and not on any arbitrarily set requirement as to how far they will have reached at the end of that time. We believe, therefore, that the one who prepares the course of study for Freshmen in college should have set foot at no far removed date in a high school and have seen the specimens there exhibited. I hesitate in suggesting this. I feel it would deprive some college people of a great pleasure. It seems so satisfying to them to say: "The boys and girls are not prepared for college as they were in my day." It would be rather humiliating to change and say: "Our course of study is not adapted to the needs of boys and girls as it was in my day."

Our second point has to do with specific requirements. By specific requirements I mean certain specified subjects or lines of work for which no substitute can be offered. I do not mean length of time, degree of thoroness, continuity of work, amount of general work. These we shall consider as general requirements. Regarding specific requirements, we ask that these be reduced to that subject or group of subjects necessary to carry on the work of the college involved.

Now the work of different colleges is so varied that I can think of but one subject essential to every one of them and that is a study of the mother-tongue. I think something like three years of English would be regarded by all as reasonable for any institution to expect. Mind you, I do not say that they all need the same kind of English, but every high school can require of its pupils three years of some kind of English work without being in the least hampered. The business and home worlds need it as much as does the college world.

If any requirements are made outside of English, we believe that they should be the peculiar essentials of certain courses of study. To illustrate: The agricultural department of one of our state universities requires a year of physics. That is probably reasonable, as a year of physics may be necessary to a prosecution of the course offered in agriculture. When, however, this same school requires two years of a foreign language, we question why. Do they use foreign textbooks? Evidently not, for they do not care which foreign language is presented, Latin, German, French, or Greek. They simply wish the candidate to have been exposed to the declension microbe. Another state technical college requires, besides English, two years of foreign language and a year of history. No substitute can be offered for either. Many a boy has to turn aside from subjects he wishes, subjects closely connected with his life-work—mathematics, science, business English—to meet such specific requirements in which he takes but secondary interest. Now I maintain that this is to the advantage neither of the boy, nor of the high school, nor of the college.

As to strictly classical schools, with rigid courses in languages and mathematics which everyone must take, the time has come for them to own that they are highly specialized institutions, on the same plane as are schools of music and of art. They must be content to receive only occasional pupils who are fitted to that particular kind of learning. We ask of such schools that they limit their specific requirements to the barest necessities in their line, and that incidentally they relinquish their claim to any exclusive right to the label "liberal education."

Now to illustrate from schools of general education, as opposed to technical and strictly classical. Our state universities and other broad institutions of learning offer a number of different courses, classical, mathematical, historical, scientific, and the like. Outside of the mother-tongue, no one subject is a common essential to following all these courses, and yet we find it not uncommon for a state university to require that every pupil present three years of foreign-language work, from two and a half to three years of mathematics, and varying other specific demands. It would be all right to require that he present three years in *either* language, mathematics, history, or science, for some one of these will be necessary to carry on his work. Some two besides English might even be justly required. But to specify in which subjects he shall specialize is entirely outside the province of any

school. The university is too wise to try to decide which shall be his major after he enters its doors. How can it tell his bent before?

There is only one ground on which specified requirements of certain subjects, not necessary in after work, can be defended and that is that those subjects are essential to the proper development of any and every boy and girl. We of the high schools maintain that boys and girls are so varied that no one subject can be found which is essential to the needs of all of them. We claim that the very intensity of interest which a boy has in some lines may leave him no time for interest in others, and that to require certain subjects is a stumbling-block to some of the brightest, keenest minds. Both Hawthorne and Lowell detested mathematics. Goldsmith could not master mathematics nor logic. Young Walter Scott positively refused to learn Greek. Dickens could not at any time in his life have passed muster in any of these except English and history. You can multiply instances at your leisure. There is a little story which has been told so often about such men as these that we have almost come to believe it. It is that men of genius are abnormal, and that this accounts for their not liking what every normal child needs. Could it be, instead, that the schools possessed any abnormal quality? One biographer of Washington Irving, explaining why he did not go to college as did his brother, adds: "Perhaps it is just as well; for his genius was left freer to pursue its own development" —and the biographer intended no slander on the school!

Our third demand is that in no subject shall there be any arbitrary dictation of textbooks, or number of pages, or methods of work. When several of the state universities ask three years of English, we are ready to comply, but when one university specifies that of this one year shall be literature, one year rhetoric, and one year composition, our patience is taxed. We believe the literary ability of our pupils should have an outlet in expression just as any well-filled barrel needs a bung hole, but when it comes to giving a year of rhetoric and a year of composition to one of literature, it seems a bit like making the bung hole bigger than the barrel.

To illustrate again: Suppose a pupil has studied four years of Latin and enters college. Suppose his four years have been spent on grammar, *Viri Romae*, Caesar, and Virgil, and that he has never read Cicero. If he is perfectly capable of reading fifth-year Latin, what difference does it make? But we are asked, in a horror-stricken voice: "Suppose he should graduate from a Latin course in college and never have read Cicero?" If a student graduates from a college course in Latin and has not the ability to read Cicero, something is wrong with the course. If he has not the inclination, he has mistaken his line of training. If he has both ability and inclination what is the danger? This making-out of the details of our own work is one of those few points of honor which we refuse to submit to arbitration.

Our fourth request is broad and far reaching but quite essential if a cosmopolitan high school is to articulate with colleges. It is that the college or university credit toward entrance a certain number of electives, say about one-third of the total, and that these electives include any subject studied daily thruout a year in high school, whether cooking, drawing, sewing, carpentry, forging, stenography, music, or agriculture. I wish every college professor who feels afraid of this new influx of barbarians could have been a high-school man and have seen the transformation wrought within our walls. It used to be that one-half the boys who took language were growling about it and wishing they were in a business course. Now we say: "If you want a business course, take it," and, more than that, we make the business course far from the goal of a "snap-hunter." No set of subjects profits in this more than do the classics. Pupils who were drones in these classes are out of them, and an inspirational depth of work is now possible. A friend of any subject ought to be the last man to demand that everybody be forced to take it.

Do you think a boy who is in the shop two periods a day designing and making on his own initiative an artistic table is on that account going to have less originality in his English composition? A little pungent sauce to accompany it does not make meat less nourishing. And stenography, that bone of contention, what can be said of it—just learning to pound a typewriter? I wish a person who thinks that could see, as does many a high-school man, girls inaccurate in spelling, in punctuation, in thinking, develop into accuracy of thought and of expression. It has never been my privilege to see so great a change wrought by pure mathematics. To my interpretation, that is not because stenography is in itself more suited to develop accuracy than is mathematics, but because the girl studies it with greater purpose and intensity. But it is said mathematics has a depth not to be found in stenography. The depth of a subject is not determined by the subject-matter but by the brain which studies it. Mechanical drawing—will anyone say that to know the language which is used the world over—by manufacturers, mechanics, architects, builders of all description, inventors—is less broadening to the mind than to know the language of our foreign neighbors? Carpentry—was the carpentry of Adam Bede worth nothing educationally? May I wonder with reverence if the carpentry of the only perfect man who has ever lived did not help make clear his conception of a house built on sand and one on rock? Physiology, hygiene, and home nursing—I wonder why such women's colleges as Bryn Mawr, Vassar, and Smith consider these outside the realm of entrance credits. Are physiology and hygiene less scientific than physics or chemistry? I cannot see why a knowledge of sewing, of cooking, of household art is not a fine thing to mix with girlhood dreams. A bit of practical judgment is just the touch needed to make the picture of the ideal touch reality.

We have not time to run thru the list. Several universities, especially

in the East, refuse recognition to all such studies as these. We believe, however, that more are coming to take the view which Dr. Davenport, of the University of Illinois, expresses in speaking of "accepting anything which the schools do and do well." He says: "Our experience is, so far as I am able to state it, that we gain in the matter of interest in life-problems and ability to solve them far more than we lose in academic finish."

Now we have asked that the Freshman year of college be adapted to the youth of eighteen; that specific requirements be limited to subjects essential to prosecution of college work; that in no subject shall there be dictation to high schools in the matter of textbooks, number of pages, or methods of work; and that approximately one-third of college-entrance requirements be elective including any subject followed daily thruout a year. What are we willing that the colleges and universities ask of us? Let them ask that our teachers be yet better trained. We need that. Our communities need that, and it is the one thing which will send to their doors better-trained pupils. It is the teacher that counts. If the liberties we have asked be granted, the road of teaching will look more inviting to men and women blessed with originality. Let them require continuity of work. It does not matter whether a pupil has studied language, mathematics, science, or history for three years, but it does matter that he should have had the perseverance to follow some one course and watch it grow. It does matter that he know some one thing well. Let them demand thoroness, intensity of work, and let them place a greater emphasis on that than on the amount of space covered. Thoroness does not spring from a feverish desire to cover ground. As Lowell put it: "Merely to bask and ripen is sometimes the student's wiser business." Let them demand initiative and originality. Let the fact that a high school is serving its community well count for something in its favor when accrediting it.

The thing which we call culture does not mean Latin, nor Greek, nor science, nor yet does it mean any one practical study. It may be found in abundance in a rude forging-shop. It may be sought in vain in a Greek class. It may be found in the pursuit of pure mathematics, or may be lacking in a study of the stars. It is not subject-matter but attitude, intensity, suggestion of possibility. It is preparation for growth. It is growth begun.

Does all this sound theoretical? On the other hand, these principles are embodied to a remarkable degree in the practice of several of our large universities. The new plan of the University of Chicago is a notable instance. It is already familiar to those interested in secondary problems. It offers to receive unconditionally, if at all. We high-school people heartily approve of this. A pupil either is or is not ready to enter college. In the way of specific requirements, it asks three units of English, three of some one of either foreign language, mathematics, history, or science; two more in some other one of these four lines, and any two other academic

units. This plan insures continuity while allowing freedom of choice. It allows intensity and gives the privilege of omitting any one or even two of the standard lines of work, provided the work be more intensive in the others. Ten units are thus required of the five standard lines. The remaining five may be electives from any line. We congratulate this institution on its ability to state the conditions which a bright high-school boy or girl likes to meet.

Leland Stanford Junior University stands ready to accept without condition the certificate from an accredited high school. We do not intend to betray a trust like this. Most of our state universities credit some elective work, and every year sees them grow more liberal in their specifications. Columbia University is ready to accept our certificates, and its requirements, while not as broad as Chicago, Leland Stanford, and some of our state universities, are still not rigid.

There is one request which we high-school people have made so often that it has not been thought worth while to repeat the arguments for it here. It is that entrance from an accredited high school be by high-school record and not by examination. This is done, of course, thruout the domain of the North Central Association, by Leland Stanford, by Columbia, and by many others, but not by Harvard, Princeton, Bryn Mawr, and several other eastern institutions. Nearly every year, however, sees one of them take steps in the direction of the certificate method. I cannot work myself up to the pitch of reverencing an entrance examination. That peculiar appearance about it which many interpret as a sacred halo looks to me like a mist of distrust, a simple reminder that these institutions are not willing to take the word of a high school. If not this, then it must be intended as a sifting process whereby a school may select for itself the strongest pupils. As such a sifting process, it is not effective, as the experience of Harvard University illustrates. That institution within the last two years has made some great changes in its admission requirements. It has reduced the number of its entrance requirements and has established a combination of certificate and entrance examinations—a long step away from its traditions. In explaining this, its authorities make some illuminating statements regarding the shortcomings of the examination system. They declare that the examination method has entirely failed to procure for them the class they wish. They virtually admit that by means of private tutors and cramming for examinations a pupil without special ability and with no ultimate motive in life may be fitted for examinations, while a boy with real purpose is offended by the exactness of the requirements and goes elsewhere.

Clifford H. Moore says in speaking of this:

> Harvard College has been failing to get a considerable number of youth, especially from the high schools—youth whom it does not hesitate to say it wishes to secure, for on the whole they constitute the sturdiest and most substantial part of every student

body. Under the new plan it is hoped that ability and purpose will be more likely to receive their reward than before.

It is interesting to be told that exclusiveness is not thoroness and we high-school men know that liberality is not laxity.

But we are told that a university must have some way to protect itself from poor students. I am not so sure of that. If by a poor student is meant a student who will not try, who will not profit by the university, that is certainly true. But a high-school record is a far surer test of application than is any examination. If by a poor student is meant one of the common people of two talents, or three talents, then I question the justice of it. The political platform of a great educational institution should be to help as great a number of people as possible to live, not to "point with pride" to graduates who make remarkable achievements, nor to "view with alarm" those who settle down to mere usefulness without brilliancy. The goal of a great university, as I see it, should be not pride—but service. To serve all men is not a lowering of standards. That greatest paradox of life holds here as elsewhere.

Whosoever would save his life shall lose it; and whosoever shall lose his life for my sake shall find it.

All this is but to say that that college or university which regards itself as a servant of the people should willingly receive all who are capable of availing themselves of its ministry. This capability has to do with the core of life and may be estimated but not measured. All that we ask may be summed up in this, that colleges and universities cease to regard the high schools and high-school students as machines to be judged by number of pages ground thru, but that instead they think of us as living organisms and apply tests of vitality.

EFFECTIVE WAYS OF SECURING CO-OPERATION OF ALL DEPARTMENTS IN THE TEACHING OF ENGLISH COMPOSITION

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The opportunity of discussing co-operation in the teaching of English composition before the Secondary Department as a whole is most welcome, for the subject is comparatively new, it is tremendously important, and it is one which English teachers cannot profitably discuss by themselves. By saying that the subject is new I do not mean to imply that no experiments have been tried or that there is no record of them. On the contrary, there are several documents which the seeker after educational experience may consult. But as compared with the question of electives or vocational guidance, the field is virgin soil.

I speak of the subject as tremendously important. So I believe it to be; no doubt all present share that opinion—or will do so on a moment's reflection. For we are here concerned with habits almost if not quite the most significant which any individual possesses, namely, language habits. No one will deny that the mastery of the vernacular is the supreme achievement of social beings, and probably no one will deny either that there is no other mastery so difficult, requiring as it does adjustments finer and more complicated than those demanded by any other aspect of human behavior. Moreover, these adjustments begin in early infancy, are operative during every waking hour, and have fairly established themselves by the time a child enters the high school. If now the pupil speaks and writes and reads well, it is necessary only that the new environment foster a growth well begun, not hinder it or destroy it. If, however, the entering student has made small progress in language or has accumulated a stock of bad practices, to save him will require the united efforts of all the teachers he may meet. How profoundly true this is appears in the doctrine, now widely accepted, that language habits are special, not general; that proficiency in a given situation gives no positive assurance that we shall find it in another. To illustrate from our common experience: Pupils often express themselves well in the English classroom, and very badly elsewhere. It is in a sense true that unless all instructors teach English it is nearly useless for any to do so. Hence co-operation deserves our most serious consideration.

DIFFICULTIES TO BE OVERCOME

By co-operation in English we mean the working together of all the teachers of a school to secure, on the part of their students, the correct and effective use of oral and written expression. We have glanced at the necessity of this; let us now consider, with some care, the difficulties which any plan of co-operation will involve.

1. *Uniform standards.*—There can be little progress in co-operating in English teaching so long as some departments support by example, or are at best indifferent to, language which others condemn or, what is equally destructive, while some departments offer no positive stimulus to accurate and adequate expression in speech and writing. It may be that the teacher of English is over-precise, a purist, and prizes too little the plain and straightforward expression of the results of observation and thought. It may be that the teacher of science prides himself on his freedom from conventionality, and has scant respect for good usage. It is, at any rate, more than likely that each goes his own way, quite unfamiliar with the attitude of the other, while the pupil finds it easy to choose the path of least resistance.

One reason for such a state is the overspecialization of students in the universities and of teachers in the high schools. A strong reaction against a one-sided preparation which can result only in mutual lack of sympathy

and support, and which tends to disintegrate the life of the pupil instead of unifying and harmonizing it, has already set in. It may be desirable to require each teacher in the large schools to give instruction in at least two departments in order to secure the necessary breadth and catholicity of interest. From the numerous suggestions concerning the preparation of high-school teachers which have come to my notice I quote the following, which is one of a series of resolutions presented by a special committee to the Conference of High Schools with the University of Illinois in November, 1913:

All candidates for high-school teaching positions should have work in English extending thru at least two years, with emphasis upon oral and written composition. The committee is impelled to make this recommendation because of the deficiencies in English that so frequently characterize high-school teachers. The committee recognizes, however, that even the best technical training in English composition will not alone suffice to accomplish the desired results. In addition to this, every effort should be made in all classes to develop adequate habits of clear and concise expression, and to encourage effective standards of diction, syntax, and logical organization. We recommend that the conference urge upon college and university authorities the importance of emphasizing this phase of education in all classes in which intending high-school teachers are enrolled.

(The last recommendation is an interesting confirmation of the necessity of co-operation in English, even in the college.)

2. *Common aims.*—But granting that the teachers of a school have been broadly and adequately prepared and that there exists among them reasonable agreement as to what standards of expression in language should be set up, difficulties will remain. Prominent among these is that of setting up common aims. Overspecialization is the chief stumbling-block here also. The teacher of physics wants to make scientists and the teacher of English wants to make novelists, while both should be eager to make men. Neither has time, or will take it, to visit the classes of the other, and no common interests are discovered. Moreover, co-operation is very generally viewed as one-sided. It is supposed to be a device for giving English a large place in the program or, on the other hand, a means by which teachers of other subjects may unload their manuscripts and escape the grind of correcting them. These objections must first be removed before the necessary willingness to co-operate can be secured.

It is not the business of the science teacher to give instruction in the principles of English composition. That subject has its technique, as all subjects have, and instruction in the technique of composition requires skill born of experience as is the case with any other sort of instruction. It will be sufficient if the science teacher will but require his pupils to employ to the full whatever command of language they possess. So far as correctness is concerned, it is certainly true that high-school pupils rarely make mistakes thru ignorance. They know what is right but fail to choose it. Teachers in departments other than English need not fear encroachment, then, for it is demanded only that they require the pupils to use the knowl-

edge they possess. This doctrine may, however, be too narrowly interpreted. Many proceed on the supposition that co-operation in English means merely correcting bad grammar, bad pronunciation, and bad spelling, with the possible addition of insistence on neat manuscript. These are certainly desiderata. "These ought ye to have done, and not to have left the other undone." Language is almost identical with thought. Meagerness, confusion, and inexactness of expression are fairly indicative of like qualities of idea. When all is said that can be said for those who think by means of images, objects, drawings, or what not, the fact remains that almost all of our thinking is done with words. Hence, when the teacher of geometry insists on crystal clearness of statement, he is really making sure that the pupil has grasped the idea; when the teacher of history requires the evidence on a point to be properly arranged and adequately set forth, he has really brought the individual and the class to a complete consciousness of the facts involved, has secured full knowledge where half-knowledge lurked before. As soon as all teachers understand this and act accordingly, our problem will be practically solved. As it is now, we divine what is passing in the pupil's mind, supply the words which he cannot find, and hasten on, with a resulting lack of thoroness which is the most crying weakness of our schools. A few things properly mastered, a few steps carefully taken, would result in more knowledge and better training than we now secure by our hurried attempt to orient the boy in his teens in all the formulated and predigested experience of the race.

3. *Working conditions.*—But quite enough has been said about teachers. They are unable, however willing, to solve the problem alone. School officers and administrators must provide the necessary conditions. Suppose the English teacher meets a class of forty pupils each period of the school day. This is a situation somewhat worse than the average, but it is by no means unknown. How, in that case, will he give sympathetic attention to the interests of his pupils so that their practice in speaking and writing may react favorably on their work in other classes? How will he attend carefully to the individual so that his grasp of principles may be assured? How will he retain sufficient energy to consult with his colleagues and devise plans of assault on particularly stubborn fastnesses of metropolitan polyglot or rural *patois?* We write a course of study for the English teacher and crowd it with literary masterpieces—thought important for those who will attend college. Then we demand more than twice as much work of him as he can possibly do well and wonder why he does not succeed in vanquishing single-handed the foes of clear thinking and correct and clear expression which have been intrenched for years and which can now command aid and succor from all sides during every waking hour.

Ultimately the problem of co-operation is one for the principal, the superintendent, and the school board. It is primarily a question of economics. In a given school, then, co-operation in English must be brought

about by the principal. He alone can see the problem from all sides; he alone is free, or ought to be, from predilection for one activity or interest; he should see his boys and girls as developing beings with whole, undivided lives; he is in a position not only to institute plans but to see that they are carried out and to judge of the results. Wherever any measure of success in co-operation has been secured, the principal has generally been the guiding force.

SUCCESSFUL PLANS

This brings us at last to the point where we can speak, for a moment, of a few successful plans. Most notable, perhaps, is that now in operation in the Cicero Township High School near Chicago, Ill. This is a school in an industrial community. The parents are largely of foreign birth and not well to do. The pupils enter high school as much in need of training in the vernacular as can be found. What Principal Church is doing here will be done elsewhere—as soon as the importance of it is understood.

Mr. Church recognized the economic aspect of the problem and began reform by inducing his board to supply him with additional teachers. He has thus reduced the number of pupils assigned to a teacher of English to sixty. These teachers are on duty in their classrooms thruout the school day and afterward, to deal with individuals and discuss their oral and written work with them. The next step was to secure unanimity of effort in certain specific matters. This was attained by having the English teachers prepare a brief statement as to what other teachers might do to enforce the instruction they were giving; as, for example, the correcting of grammatical errors, the use, when appropriate, of full sentences, etc. Eventually it was found desirable to issue a monthly bulletin by means of which every teacher might know what instruction in English was being given and might demand that it be observed in his recitations. It was agreed that all departments should keep a separate and distinct record of the quality of the English used by each pupil, and the average of such marks was permitted to form 25 per cent of the composition grade given to the pupil at the end of the semester.

The effect is described by competent observers as wonderful. The entire school is pervaded by an atmosphere of good English, and the performance of the pupils, coming as they do from ill-educated homes, is comparable to that which may be found in the small high-grade private school.

Another typical example of successful co-operation is to be found in the Boston High School of Commerce. The principal, Mr. O. C. Gallagher, describes their plan as follows:

> To keep the pupils on the watch for accurate, effective, and smooth composition in all their work they were informed that at frequent, tho unstated, intervals their papers in other subjects would be corrected by their English teachers, to ascertain their observance of the principles taught in the English classes. The marks thus obtained are entered

upon the regular composition work, and unsatisfactory papers are revised or rewritten—the same as unsatisfactory themes. In addition, teachers of other subjects are urged to send batches of papers whenever pupils seem to be growing careless—a condition that often prevails immediately after the correction of sets of papers in subjects other than English.

The teacher of the other subject demands that the work be clear, and substantially correct in spelling, punctuation, and sentence structure. Failing to secure the first, he lowers the pupil's mark, and at his option, demands revision; failing to secure the second, he withholds all credit until the work is presented in a satisfactory form. The teacher of English insists that every piece of writing shall be regarded as an English theme to be corrected, revised, and rewritten, and to count in the making-up of the mark in English. The collection of papers at unexpected moments convinces most pupils of the unwisdom of taking chances; for even if the English teacher fails to collect a set, the teacher of the other subject is likely to send him any piece of slipshod work.

Again, a conscientious attempt is made to teach pupils how to answer questions in other subjects. We correlate the English work in the first year with history; in the second, with commercial geography; in the third, with local industries and civil government; in the fourth, with business law and economics. By drawing upon these branches for occasional subjects, and correcting the themes orally for sentence structure, unity, mass, and coherence, we try to train the pupils to bear in mind the principles of English while their attention is focused upon another subject. Similarly in connection with science, descriptions of apparatus and expositions of experiments are required, and the teacher of science is consulted as to the adequacy of the productions from a technical standpoint. With foreign languages the English department has found most need for co-operation in drill upon points of grammar as they are taken up in German and in French.

Besides "corrective" co-operation, there is such a thing as "preventive or anticipatory" co-operation, which is quite as important as the other. Since most teachers are interested in English as a means rather than as an end, the use of English must be made effective in recitation as well as in writing. Several subjects taken up in the first year of a secondary school lend themselves readily to such drill, especially history and elementary science. After consultation between the teacher of English and the teacher of history, the history textbook may be taken up in the English class, and the pupil taught how to make his English do the work that the author tried to have his do. What has the author aimed at? Did he hit it? Why? How? This brings the pupil to the outline; he must get his sights in line. Then the discharge—oral delivery. The class watch as markers, criticize the sighting, aiming, line of flight, and the hit. The aim is thus upon the English essentials of unity and coherence, in whole composition, paragraphs, and sentences.

The result is easier work for the teacher of history, for the teacher of English, and for the pupils, since the work in the English class is "a practical job." The pupils can measure the success of their effort in one class by their achievement in the other.

Reports from several other schools embody some of these ideas and suggest a number in addition. One of the most striking is that of keeping pupils on probation in English thruout the course. Delinquents who have been warned and who fail to improve are remanded to the English department for such further training as seems necessary. This may result in the establishing of a sort of hospital squad. Naturally pupils wish to get out of the hospital as soon as possible. Sometimes it is possible to require those who persist in making mistakes in externals such as spelling to take a course in typewriting. Again, certain teachers or departments find it

possible to employ the same subject-matter for a part of the course. Science notebooks are made the basis of instruction in sentence structure in the English class, pupils engaged in shop work are taught how to organize notes on their projects in the form of analytical outlines, etc. The outside reading of the pupil is sometimes directed to lists of books which have been made up by all departments in conference, and care is exercised that only a reasonable amount of collateral reading is required of any pupil. Similarly the amount and distribution of written work are determined, the form of notebooks is agreed upon, etc. Of great importance is the compiling of a standard guide to the preparation and correction of manuscripts, which should reflect the practice of good publishers and which should be in the hands of all teachers and pupils and be consistently adhered to.

Various attempts have been made to work out a practicable method of grading so that due account may be taken of the value of substance on the one hand and externals of form on the other. Some years ago, G. H. Browne, head master of a preparatory school in Cambridge, Mass., established in his institution the custom of dual marking by means of a "numerator" and a "denominator." The mark above the line was to stand for substance in all papers, including those for the English teacher, while the mark below the line was to indicate excellence in "mother-tongue," that is, spelling, etc. Marks of the latter sort were sent in by all teachers, and averaged and reported to the parents. The effect is said to have been immediate and gratifying. Lately the practice of holding occasional conferences at which a few papers are examined, corrected, and graded by members from all departments has been growing in favor. Marking has been further systematized in a few cases by the working-out of some sort of scale after the general plan of that invented by professors Thorndike and Hillegas. These conferences are necessary and may be made the means of unifying and co-ordinating the activities of the different departments of a school to a remarkable degree.

To summarize: Co-operation in English composition, to be successful, must be organized and administered by the head of the school for the good of all. This will involve the setting-up of common aims and the establishment of suitable working conditions. Instruction in the technic of speaking and writing should be regarded as the work of the teachers of English. Teachers of other subjects should refuse to accept oral reports or written papers which are below the standards agreed upon. If the delinquent student fails to repair the deficiency, he should be reported to the principal and sent to the English department for further training. In matters of substance, particularly clearness and completeness, the teacher of each subject should point out the weakness, cause it to be removed, and apportion credit to the paper in accordance with the degree of success attained. By means of class visitation and conference, teachers of English and of

other subjects should seek to join their efforts so as to accomplish the most effective training of the student in the arts of study and of expression with the greatest economy of his time and the most consistent unifying of his life.

HIGH-SCHOOL COURSES

MILTON C. POTTER, SUPERINTENDENT OF SCHOOLS, ST. PAUL, MINN.

The great American experiment of universal education has already induced a reconsideration of the question: "Who is the educated man?" The attempt to educate everybody has compelled some variations in content and method. They have been painfully slow in breaking thru the hardened formalities of the last century. But here and there some differentiation has become more or less securely established. If it is already asserting itself as a *sine qua non* for the educated man it is probably one of the earlier "electives." The rigidity of educational conservatism is equaled only by that of theology. But the facility with which some advocates of the elective system change front after their particular elective finds general adoption in some curriculum and become rigid formalists demanding compulsory injection of their specialty into every student is still more marvelous.

The men who conceived the wild project, the lovely dream, of universal secondary education in America were the product of classical colleges. They knew but one sort of educated man. He was one who by a specific "discipline" had strengthened all his faculties to a certain "harmonious symmetry." He must specially study along his weakest lines. He was best and almost solely manifested in the classical college graduate.

If one consider the high school the doorway to college it is certain that the people are justified in a common attitude which assumes that the undoubted right of every earnest and intelligent child to attend high school by no means connotes the *desirability* of every child attending high school. Financial conditions in the home, the father's calling, the parents' hopes, the child's bent, and the judgment of relatives as to the relation of formal schooling to a life or to a living, have all combined to reduce the number taking college-entrance work in American high schools.

In a report for 1910 on "Secondary Education," the United States Bureau of Education shows that from 1889 to 1910 there has been a steady decline in the percentage of high-school children preparing for colleges. At the beginning of that period it was 14.44 per cent. At the close it was 5.57 per cent. This shrinkage has been synchronous with a vast expansion of total high-school enrollment which has accompanied the process of widening and liberalizing a really catholic curriculum.

What would have happened to secondary enrollment but for this comparatively free development of the curriculum may be imagined from the

fact that so few of the total number graduate, or, if they do graduate, are not of the college-entrance variety. A questionnaire, ambitiously called a "survey," taken June 21 on the Chicago streets, "Are you a high-school graduate?" "Why not?" covered 200 persons and resulted in 34 affirmative answers to the first question. Of those answering negatively 130 said they "never cared to go to college," or knew they would be unable to do so. The older conception of the purpose of high-school training and graduation is not far from this. Many people have unconsciously tho not altogether approvingly abandoned the graduating machinery of the high school to the purposes of outside tertiary institutions.

The total number of students in American high schools during the school year 1909–10 was 915,061. These were many of them attending for a short time, serving what they conceived to be their own life-purposes rather than those of higher institutions. The total number of graduates for the same year was 111,363. And, still more, of those who did graduate, but 37,811 were graduates prepared to enter college.

The high school must make it known, and must make it a fact, that it can and will serve others besides the prospective members of the professional and learned classes, or the audience may hoot the curtain down and Hamlet find himself out of a job. And this, in view of the average graduate's very real service to all society, would be a calamity.

On a four-hour trip from Duluth to St. Paul the other day I made a leisurely "survey" of the trainload of people composed of ninety-seven persons, to whom I added the conductor, brakeman, and porter to fill the measure of an even hundred. Incidentally, the conductor, J. W. Sargent, of N.P. train No. 63, audited and signed my "survey," adding the statement, "There is not a stop on this line without a high school."

There were in the three Pullmans of this limited train twenty persons.
Of the twenty there were ten who had attended high school.
Of the ten there were eight high-school graduates.
Of the eight there were seven who had attended college.
Of the seven there were two college graduates.

In the two day coaches there were eighty persons.
Of the eighty there were twenty-five who had attended high school.
Of the twenty-five there were nineteen high-school graduates.
Of the nineteen there were eighteen who had attended college.
Of the eighteen there were twelve college graduates.

Of the trainload there were 27 per cent high-school graduates.
Of these there were 52 per cent college graduates.
Of the total number there were 14 per cent college graduates.

We all became good friends on that train. Every one of the hundred answered freely and happily without a single exception, and I secured a day of unusual happiness, together with several forgotten rights, privileges, and benefits by having rediscovered my membership card in the human

race, which card I had mislaid somewhere back in my twenties. And the "survey" isn't so bad. Of course it doesn't prove anything or indicate a line of action or anything, but then it doesn't pretend to. Anyway it was a lovely day and it's a pretty nice scheme for a doctor to get acquainted with his patients—and employers.

Teachers' talk about teaching—in National Education Association proceedings, in various portentous reports, and in the Curtis Publishing Company's pleasing papers—has always left me wondering what contemporary laymen honestly think about us and our work whenever they do think about us at all. So I was not sorry at the chance to compare some of our recent toad's-eye views with a bird's-eye view of the man up a tree.

The entire assembly, excepting a woman, and a preacher, and a priest who diplomatically agreed with her, thought that there ought to be as many courses as there are students in a composite high school, or thereabouts. In other words, they thought that a patent dietary or prescription cooked up for all pupils alike was likely to be good for some of them, but also bad for some of them. They thought that patent medicines were almost always nostrums.

Of course it is easier for the professors in colleges to receive and handle an identical product from the schools below each year, representing uniform brain contents and habitual reactions. It is easier to teach any class so composed. But that fact and that tendency in class teaching is its greatest weakness. Variation and not uniformity is the biologic rule, and it is a law of all continuous mental cultures.

If they must in their judgment demand identical, or at least similar, preparation of all candidates for college entrance, then let the colleges demand it. But let the prospective college-entrance candidate, rather than the public-school system as a whole, prepare to meet those demands. Every high-school office should have the demands of various colleges tabulated and carefully filed, so that parents and teachers may assist the single student to carry his individual responsibility, which should not rest upon any other student whatsoever.

The Bureau of Education report quoted above would indicate that there are constantly fewer high schools in which a student must pursue a college-preparatory course in order to retain his membership. There are several schools in which students may graduate without graduating into a college. Many students receive diplomas which are testimonials of the required amount of honest work earnestly pursued with fair success, and which diplomas are not accredited for college entrance or expected to be.

There are some high schools in which the collegiate sheep of a single brand are not segregated at commencement in a high place apart from the heterogeneous goats of rebellious blood. And there are a few high schools in which ample mental and moral development as shown in *any* fields of work entitle the candidate to receive a high-school diploma of graduation at the same time and place and in the same way as do all his fellows.

In such schools the child and his parents consult with the principal or faculty adviser and arrange a course for that child and not for some other. Then truly the principal is a social practitioner rather than a patent-medicine vender. Then indeed the home and the high school co-operate with and understand each other. Then quite usually the school people and the home people speak a common language. School reports and inside surveys are no longer bound up in an educational phraseology which no one but educational experts can understand.

"The individual course of study" must ultimately differentiate the work of smaller high schools, each rural or special city high school offering but a part of the work found in a great composite high school, until each such distinctive school shall be known for its special service to its section of the country as well as for the integrity and kindliness of its graduates, which qualities must condition any scholarship whatsoever that is not to prove a public curse rather than a blessing.

The four-year group of one-period daily prepared recitations, such as the Latin group, the mathematics group, the English, Scandinavian, French, German, Spanish, craft, household, history, science, shop, clerical, commercial, business, fine art, or any one of several other groups, is the largest proper unit in the public high-school curriculum. The group (once called a department and more loosely called a course) becomes the basis of the organization and arrangement of high-school studies. Every student does something in several of these groups, and everything in one or two of them, and presents thirty-two semesters of one-period daily prepared recitation credits or their equivalent when he appears as a candidate for graduation.

Today's educated man does not assume to have equally strengthened and finished all his faculties. Many an educated man is idiotic along some lines, and honestly admits it as he dared not do a few decades since. But he must know his own line, do his own work skillfully, and possess enthusiasm and knowledge along several lines outside of his own vocation. To produce such men, identical courses of study for masses of students are worse than useless. Universal prescriptions are silly, to be sure. But worse than that, they often almost compel dishonesty, they are sometimes cruel, and they are not infrequently destructive of all scholarly enthusiasm.

The new individualism is quite as old as the elective system in colleges. It saves what was best in that system, and embodies it in the high-school group curriculum, in which many kinds of secondary students are concerned, upon which the individual course of study is based.

THIRD REPORT OF THE COMMITTEE ON THE ARTICULATION OF HIGH SCHOOLS AND COLLEGES

In 1910 this department adopted resolutions requesting the colleges to discontinue the entrance requirements of a second foreign language and to recognize as electives all subjects well taught in the high school.

In 1911 this department adopted the first report of the Committee on the Articulation of High Schools and Colleges. This report contained:

a) Some preliminary considerations on the field and function of education in the high school.

b) A working definition of a well-planned high-school curriculum.

c) Reasons for the adoption of this definition as the basis of college admission.

d) A supplementary recommendation that high-school work in both foreign language and mathematics be no longer regarded as an indispensable prerequisite to a college education.

In other words, the committee recommended that the completion of practically any broad, well-planned high-school curriculum should be accepted as preparation for college.

Thru the co-operation of state superintendents of public instruction and college presidents, some 30,000 copies of this report were distributed. The recommendations contained in the report are receiving approval and adoption by an increasing number of educational associations, colleges, and state boards of education.

It was recognized that the adoption of the recommendations contained in this report would place greater responsibility upon the high school for the development of well-planned high-school courses and that the time was at hand for national committees to study the reorganization of the various subjects.

In 1912 the Committee on the Articulation of High Schools and Colleges accordingly recommended that a subcommittee be organized for each of the following subjects:

1. English
2. Mathematics
3. Ancient languages
4. Modern languages
5. Social studies
6. Natural science
7. Manual arts
8. Household arts
9. Agriculture
10. Business
11. Music
12. Pedagogy and Psychology

This recommendation was adopted and the President of the National Education Association was requested to appoint these committees. During the past year, all of these committees have been organized with the exception of the Committee on Mathematics and the Committee on Pedagogy and Psychology.

Great care was taken in selecting the chairmen and members. Many people, including each state superintendent, were asked to suggest persons best qualified for the work. Over one hundred members have been appointed and those people are well distributed geographically, thirty states being represented.

The chairmen of the ten committees already organized are as follows:

English—James F. Hosic, Chicago Normal College, Chicago, Ill.
Ancient language—Walter Eugene Foster, Stuyvesant High School, New York, N.Y.
Modern language—William B. Snow, English High School, Boston, Mass.
Social studies—Thomas Jesse Jones, Bureau of Education, Washington, D.C.
Natural science—William Orr, deputy state commissioner of education, Boston, Mass.
Manual arts—Frank M. Leavitt, University of Chicago, Chicago, Ill.
Household arts—Amy Louise Daniels, University of Missouri, Columbia, Mo.
Agriculture—A. V. Storm, University of Minnesota, Minneapolis, Minn.
Business—A. L. Pugh, High School of Commerce, New York, N.Y.
Music—Will Earhart, director of music, Public Schools, Pittsburgh, Pa.

During the past year, two joint conferences of these committees have been held in Philadelphia, one in December and one in February. Some of the committees have already made substantial progress.

It was the sense of the conference held last February that there is danger of misunderstanding if these committees continue to be designated as subcommittees of the Committee on the Articulation of High Schools and Colleges, since this title suggests that these committees are to be influenced by the traditional conception of preparation for college. Consequently the conference voted that a change of name be requested.

It seems important furthermore that a committee be organized to review and co-ordinate the work of the various committees. While details must be worked out by specialists, it is peculiarly important in problems of secondary education that the specialist shall think in terms of the development of the boy and the girl rather than in terms of subject-matter. To insure reports in which the valid aims of education are clearly defined and closely pursued, it is desirable that the chairmen of the various committees shall confer together and that they shall also consult with a group of men who are accustomed to consider the problems of secondary education in the large.

In view of the foregoing statements, your Committee on the Articulation of High Schools and Colleges makes the following recommendations:

1. That the Secondary Department request the Board of Directors of the National Education Association to create a Commission on the Reorganization of Secondary Education.

2. That this commission shall consist of the following committees:

a) The present Committee on the Articulation of High Schools and Colleges.

b) The ten committees already appointed upon the various high-school subjects.

c) A Committee on Mathematics.

d) A Committee on Art instead of the Committee on Pedagogy and Psychology which was authorized last year.

e) A Reviewing Committee composed of the chairmen of the preceding committees and not more than ten "members at large."

3. That the chairman of the Reviewing Committee shall be the chairman of the commission.

4. That the President of the National Education Association be requested to appoint such members of the commission as have not already been appointed upon the various committees.

5. That the National Education Association be requested to appropriate the sum of $1,350 for the work of this commission during the ensuing year.

6. That the Reviewing Committee be requested to consider the recommendations made by the several committees and to report back to these committees any changes which seem desirable. In case any committee disagrees with the findings of the Reviewing Committee, the final report should contain a statement of both positions.

7. That at least one meeting of the Reviewing Committee shall be held during the ensuing year.

8. That the Reviewing Committee shall report to the Secondary Department and that the other committees report at the appropriate round tables.

9. That each committee shall submit a report in 1914, but that a final report shall not be required earlier than 1915.

10. That the United States Bureau of Education be requested to publish and distribute the reports of the commission from time to time.

Respectfully submitted,

Committee

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WILLIAM M. BUTLER, principal, Yeatman High School, St. Louis, Mo.
FRANKLIN B. DYER, superintendent of schools, Boston, Mass.
CHARLES W. EVANS, supervisor of English, East Orange, N.J.
CHARLES H. JUDD, head of Department of Education, University of Chicago, Chicago, Ill.
ALEXIS F. LANGE, head of Department of Education, University of California, Berkeley, Cal.
W. D. LEWIS, principal, William Penn High School, Philadelphia, Pa.
WILLIAM ORR, deputy state commissioner of education, Boston, Mass.
WILLIAM H. SMILEY, superintendent of schools, Denver, Colo.

July 11, 1913

NOTE.—This report was adopted at the meeting of the Secondary Department, the Association appropriated $1,350 contingent upon the condition of the treasury, and the Board of Directors authorized the formation of the Commission on the Reorganization of Secondary Education, as requested in this report. The United States Bureau of Education is issuing a bulletin containing the reports submitted at Salt Lake City, July, 1913. The Reviewing Committee is to meet at Chicago, December 29, 30, and 31, 1913.

TANGIBLE WAYS OF USING A COMMUNITY IN SECONDARY EDUCATION

F. D. THOMSON, PRINCIPAL OF HIGH SCHOOL, SPRINGFIELD, ILL.

Those who have a vision of the possibilities of what the high school really can do for a community can find many realizations of it in many places and under all kinds of conditions, but where such work is being successfully carried on the needs and conditions of the community have been used as a basis upon which to build and as a guide to give direction and fitness to the work.

Boys and girls in their "teens" have been educated before our time. The problem is not new. Changed conditions in society place the emphasis upon the school in a new way. Home life changes, industrial life changes, and necessarily school life must change, and because boys and girls of high-school age are passing thru such a critical period of life the importance of high-school work is being realized and every means that may contribute to carry young people safely thru this period must be utilized.

Fortunately, the high school does not have all the responsibility, but it is coming to be recognized as a social factor, and, as such, it has its duties to perform. Among them are its helpful and healthy relation and support to all other social agencies that are looking for the social betterment and improvement of the community. Along with the home, the church, and the state—the primary social elements—the school has taken its place as their most potent handmaiden, and the high school is one of the most promising fields in which to make social work effective. It has the vantage ground on account of being the common meeting-place of its members, where all are considered upon an equal basis of right and justice and where all have a consciousness that they have such a right to be so considered. By the proper administration of school affairs this lesson of equality and justice can be impressed upon the community in one of the most effective ways.

In no phase of high-school work does the personality of the teacher play a more important part than in making the school a social factor in the community. Wherever a high school becomes effective in this way, it has come about thru the personality of a teacher or a group of teachers who have taken upon themselves the accomplishment of some line of social service thru the pupils. Sometimes where the school is small it is not difficult to make the school a social factor, for one person may do it. Where the school is large, teamwork among the teachers must be developed in order to guide and direct the pupils to carry on such work, and where specialists are to be considered it makes the problem none the less easy.

In looking up the various organizations in our community, it was found that there were no fewer than fifty that are working along lines of social advancement and improvement, and if societies of the same kind were counted individually this number would be materially increased. A few

lines of work have been selected as illustrating some activities in which the high school may use the community in secondary education.

In order to do any work of this kind the school must be in the right attitude toward the work to be done, and perhaps the best foundation for this is thru a knowledge of the purpose and the importance of the work to be undertaken. To use the community, it is necessary to know the community. It must be made the subject of study, and important and valuable material concerning it may be collected as a part of the school work of various departments of the school.

The business and industrial work of the community can be studied by classes that are taking work in the commercial courses in the school, and the teachers of this department can direct the pupils where to find the required information and then have it put into such form that it may be available for other uses. Such a study will open up new lines of thought and train the pupils in the way of gaining information first hand, weighing its importance, and that too from sources not found in books.

Public exercises and programs may be used as laboratory work for pupils who are taking work in public speaking and are able to take part with credit to themselves. They can find no better place to put into practice what they learn in class. The motive for doing the work adds an interest to it that is good for the pupil and good for the community.

The study of municipal problems that are under consideration by the community will furnish an incentive for reading and an interest in public affairs that will make local government a vital subject which mere book knowledge cannot do. Questions of civic improvement and the work and purpose of patriotic societies can be brought out in a way that adds life and interest to school affairs.

To inculcate a spirit of voluntary service for the good of the community or some public institution, without any thought of a money return and with no thought of reward other than that that comes from a satisfaction of a piece of work well done, and that, too, for the public good, is a great lesson to teach and a greater one to learn. Public amusements and playgrounds can be studied, and the work carried on where voluntary service has to supplement what the community can afford to pay thru the help of some society in the school or by individuals there.

To enlist the interest of high-school pupils in helping those who are not able to pursue their education on account of the sacrifice of time and labor is well worth special attention and effort. By encouraging such persons to go on with their studies in school by attending a part of the time, or by attending night school, or by attending day school every other semester, cultivates an appreciation for school work and a feeling of its value that cannot be secured in any other way. Sometimes the encouragement of parents to study certain subjects with their children will improve home conditions by renewing the memories of youth on the part of the parent,

and by creating a feeling of obligation and appreciation toward the parent on the part of the child.

Do you wish to help raise the standard of the community and cultivate healthful sentiment in the minds of the young people toward things moral and religious? Then this will be aided thru the right attitude toward these matters by the teachers who need to have more than a passing knowledge of what the young people think and feel on these subjects.

A study on the part of high-school pupils of the different vocations, the necessary preparation for the same, the remuneration, the outlook, the advantages and disadvantages, the number engaged in them, and such other information that applies to them will assist everyone in making a choice that too often is left entirely to chance.

Perhaps in few lines can the high school do more than in the way of amusements and entertainments. By offering a place where young people may gather frequently and under safe and healthy conditions and at little expense, the high school can render a most valuable service to many a home that would otherwise be at a loss to know where the young people might be allowed to go with safety.

An interesting experiment, which shows what may be done with boys of high-school age when an opportunity is taken advantage of, has been carried on by the State Board of Agriculture of Illinois. Each county of the state is allowed to send a country boy and a town boy to the boys' state fair school which is held during the week of the state fair. The course of study for the week is laid out and experts present the topics desired, and they use the exhibits at the fair to illustrate their subjects. The various exhibits are also made use of for special study, with explanations by those who understand their importance. This brings together a large number of most promising young men of the state, and the acquaintances formed by their association during the week are quite as valuable a factor in the education of the boys as the special instruction that they receive from the able lecturers they hear. The enthusiasm of youth, and the inspiration of a teacher imbued with the right attitude toward life and its problems form a combination that makes for progress wherever they come in contact. The more places such combinations can be made the better. For the good of the state and of the communities where these boys live such an assemblage pays, and school men will do well to encourage such efforts and utilize the spirit prompted by such meetings for the good of their own communities. County fairs offer the same opportunity on a smaller scale and are well worth more attention along this line than they are receiving. What we need to do in our school work is to take advantage of opening opportunities.

If one will take up the study of his own community he will be surprised at the number of organizations that are at work along some line of social service, and he will be quite as much surprised also to note how very little

one organization knows of the work carried on by the others. There is no clearing-house where all of these agencies might learn much valuable information and combine in some way with others at times for a general community uplift, and at all times cultivate a healthful growth and spirit for social service. Is there not a possibility that some time that clearing-house may be supplied by the high school calling together representatives of these organizations and showing how they might all assist in a more definite way to reach the young people of the community for the purpose of attaining a higher plane of better living and higher thinking, or of saner living and saner thinking? These are all community problems. The high school is in their midst. May it do its part toward their solution.

OUR HIGH SCHOOL AND ITS GIRLS

SUSAN M. DORSEY, ASSISTANT SUPERINTENDENT OF SCHOOLS, LOS ANGELES, CAL.

The situation in the high-school education of girls is a real one, containing elements of tense interest, a combination of conditions strikingly and increasingly novel, which call for prompt, thoro, and ceaseless adjustment. The crowding of our cities, the loneliness of our countryside, the introduction in swift succession of new appliances for convenience and pleasure, such as the telephone, the automobile, the moving picture—all these create a situation for young life as interesting as it is perilous, a situation which can be controlled if taken in time, and if we show ourselves alert and resourceful in the adaptation of old methods and the adoption of new ones. There must needs be much sharpening of our wits, a full comprehension of the present conditions of young girl life both out of school and in school, and more than that, a buoyant realization of our possibilities to master all adverse conditions.

Here are a few of the facts which we all know, but they fit into my story, and they will bear repetition. Our young people are somewhat too independent of the old-time family life to be quite safe. Too many mothers are utterly unobservant of the true conditions, and pitifully obtuse to the real dangers, of girl life. They have not sensed the situation at all.

Here is another fact. There are still those in school work who refuse to recognize, or at least to admit, that the problem of our girls is to any degree a more pressing one for school administration than formerly. If we choose to interpret our positions as salaried "jobs" with the altruism all left out, then we may go and come with untroubled hearts, but if ours is a contract with this great nation, to educate its youth, to lead them along the bigger, broader, grander, but more perilous life of a new century, and to interpret that life for them in workable terms, then our school officials have responsibilities commensurate only with their possibilities to protect and help our girls.

Whatever is said here will be the simple rehearsal of the manner of living with our girls in their high-school years, as I know it and have had a part in it in the city where I live and work.

In the first place, our particular school system has been most generous in recognizing that girls are entitled to the especial attention of an older woman, that there are every day delicate questions of conduct and health which cannot be profitably or suitably discussed in a conference with a male principal. We also realize that there are certain confidences of an entirely personal and many times delicate nature, which mothers hesitate to make except to a sympathetic, understanding woman. We feel that the well-being and possibly the saving of the girls, physically and morally, depend upon the knowledge of those facts by some school officer empowered to use that knowledge wisely in the training of the girl. Because of these convictions, we have a woman vice-principal in each high school. In the larger ones, this officer does no teaching, but devotes her entire time to the care of the girls. All cases of discipline, all failures in work, are referred to her. All information bearing in any way upon the conduct of the girl in school or out of school is reported to her. All excuses to leave school before the close of the day are secured from her, and a daily record kept of such goings, so that they may not unduly multiply. The vice-principal's office is fitted with telephones, making instant communication with parents or friends or higher school authorities possible. The principal never hears of a minor case of discipline. Only the more serious offenses, calling for severe measures and the principal's confirmation, ever reach his office.

Perhaps someone is curious to know how the principals like the delegation of so much responsibility and authority to another. They altogether approve. In confirmation of this fact I will mention a recent incident. In our city we have the intermediate schools, which include the seventh, eighth, and ninth grades conducted after the fashion of the high school, somewhat on the departmental plan, so that the same teacher has many different classes in a day and cannot know her pupils so well as in the lower grades, where the pupils remain with one teacher all the day. At a recent meeting of our Board of Education, because of the earnest solicitation of the principals of those schools, it was decided to extend this office of woman vice-principal into the intermediate schools also. After a careful survey of the whole situation, this conclusion was forced upon us, that there is no more critical period in a young girl's life than those particular years of the seventh, eighth, and ninth grades, and that the tendency to wrongdoing is developed before the high-school period, and that there is great need here of wise, womanly supervision. The woman vice-principal, then, is the guiding spirit of our high-school girls.

As the aids of the vice-principal, there is a group of girls known as the self-government committee. This committee has charge of the conduct of the girls in the hall, in the assemblies, on the grounds, in the lunchroom,

in the gymnasium, in fact everywhere except in the recitation rooms. Those guilty of misdemeanor are tried and sentenced by this committee, always of course with the privilege of appeal to the vice-principal. Appeals are rare, and generally result in support of the self-government decree. A distinct effort is made to impress upon the student committee that the highest art in government is absence of obtrusive control; that the aim of their work should be the growth of the students in self-respect and self-control; that the committee should never rush to assert authority, but when occasion demands should maintain a firm and fearless front.

Another important aid to the vice-principal is a girl known as usher, for want of a better name. Each day a different girl is selected from the older classes to sit in the vice-principal's office as her assistant for the day, to run errands, to show visitors about the buildings, to secure record cards and registers when needed, to summon students to the office, in a word to be a general helper. I have had girls tell me at the end of the day that they had received a liberal education, such a new insight had they gained into the real meaning of the school life and work from this day at headquarters. Each girl as she passes from that experience has ever after a slightly different attitude toward the school administration, can be counted on to measure up a little more nearly to the full stature of a right-minded schoolgirl. Only those are selected for this work whose regular school tasks are being satisfactorily accomplished.

To the health of our young people we give the first attention. Each girl who enters the school has an interview with the woman school physician, who in a general way is the supervisor of all physical training, which is required with few exceptions, and is graduated to the needs of the girl, according to the findings of the physician. To a large extent, health exercises are taken out of doors, a thing possible for most days of the year in our city. The spirit of play and the love of play are encouraged, substituting games and walks in the hills for formal gymnastic exercise, whenever practicable, because of their social value and because thru these we have the natural expression of young girl life. A restroom fitted with couches furnishes a quiet retreat for the girl who, because of overwrought nerves or excessive home work, needs perfect relaxation instead of exercise. Corrective work for those who have stooped shoulders or other more serious defects or ailments is given in special classes. In this way we make the girls our girls, and they soon begin to look upon the school physician as their best friend. Great care is taken not to offend the medical belief of any girl. Telephones in the gymnasium office make it possible to keep in touch with the family physician of whatever medical faith.

Under the supervision of our school physician come our courses in hygiene and sanitation, which comprise two broad divisions, the one having to do with the general structure and hygiene of the body, and general sanitation, the other, which we call personal or sex hygiene, having to do

with the structure and health of the body as girls and as the women-to-be, who will become the home-makers and mothers of their generation. This latter course is given only by our physicians, women thoroly educated and trained, with healthy, happy minds, refined natures, splendid experience, and with this most important qualification, an utter absence of foolish sentimentality. These school physicians present the subject of personal hygiene in a straightforward manner as information which every girl is expected to have. There has been a deal of talk about this matter of sex hygiene of late as a subject quite strange and sometimes almost uncanny. Away back in dear old New York state, in a little country academy, in the days of my girlhood, I was given a course in this very subject, by a capable woman physician. It was not thought necessary to trumpet the matter in the newspapers or to canvass the pros and cons at great lengths in numberless conventions. In a quiet, sane, sensible way, the instruction was given, to the great profit of many young girls. Verily there is nothing new under the sun. We only need to *act* and cease talking.

We come now to the intellectual training of our girls. Here the vice-principal needs to be a woman of great sympathy, with a broad outlook upon life, studying constantly new ways in which the school may serve our girls. We formerly thought our object attained if we turned out an intellectual product which could pass the test of college-entrance requirements. This is still important. All life is a testing and there should be no weak places in the educative process, but for the large numbers who never go to college as well as for those who go we must broaden and multiply the possibilities, thru every phase of home economics, home decoration and architecture, and thru vocational work of every kind. Nearly all our high schools afford extensive courses in the first-named subjects and very fair possibilities of a vocational kind reaching into the thirteenth and fourteenth years. One duty of the vice-principal is to give vocational talks to the girls in assembly. Frequently women experts in the various callings are asked to speak on their respective lines of work. In this way our girls learn of vocations other than the already overcrowded ones of teaching and stenography, and valuable hints and suggestions are given, which aid in the selection of their lifework. As intellectual adviser, our vice-principal is also invaluable to the girl having trouble with her subjects.

As social adviser, the vice-principal finds a unique and important phase of her work. Every effort is made to help the girls realize that they can have good times by themselves, without the presence or co-operation of boys. To this end the utmost emphasis is placed upon the desirability of cultivating girl friendships. Boys may go alone into the hills and canyons for a day's tramp, with comparative safety. This is never safe for girls. For all their good times, they are dependent upon chaperonage. Restive under this disability, they are more or less inclined to escape by accepting the company of boys for automobiling or tramping. To avert this condi-

tion we try to show our girls how they may have good times by themselves, and we provide suitable women attendants for their parties and for their tramps to the hills, canyons, and beaches. After school on a Friday afternoon, the girls' gymnasium is open for a social hour. An impromptu entertainment with outdoor sports in which all participate, including the teachers, makes an event remembered with delight and creates the feeling that they are really "our girls." The general care of these social occasions is the work of the vice-principal, but the special details are intrusted to committees of girls and teachers.

Once or twice each year a circular letter is sent to the parents, suggesting ways in which they may help the school life, the need of home study, of early hours, and of the elimination of social events on school evenings, the danger of the automobile, and the importance of chaperonage for girls. These letters for the most part are cordially received, and have elicited many delightful replies.

As another feature of our social program, once or twice each year we invite the mothers to the school and show them what our girls are doing. There is an entertainment by the girls' glee clubs and expression classes, with folk dancing and short talks on our aims and ambitions for our girls, followed by an informal reception at which mothers, teachers, and daughters all come together.

In all hitherto said, you might infer that we hope to make our girls healthy, happy, and wise by doing things for them. There is another side to all our training. All, but especially the older girls, are encouraged to enter into the broader life of the school in a spirit of helpfulness. Each term the vice-principal organizes a corps of the older girls to work definitely in the interests of the younger ones. They greet the newcomers at an assembly call in words of welcome, giving also brief explanations of the life and aims of the school. Short talks, based on their own experience, give cautions along the lines of starting right, of realizing the need of home study, of forming right friendships, of taking enough exercise, and kindred subjects. They also explain the plans for social events. Student helpers are ready at certain periods in the day, or before and after school, to give assistance to the younger girls who are having trouble with their subjects. The cultivation of this spirit of guardianship is one of the most developing factors in any girl's life. It is the laying-hold of her natural instinct to help and mother, and the guiding of that instinct into lines of usefulness which will enlarge her own nature, and contribute immensely to the general ennobling of the whole school life.

In general it may be said that public opinion in schools, backed by intelligent, active student citizenship, which feels that school is not a thing imposed, but is in large measure a thing of its own guiding, creates an atmosphere where our girls will the more surely grow into happy, healthy, and efficient women.

DEPARTMENT OF HIGHER EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—WILLIAM O. THOMPSON, president of Ohio State University.....Columbus, Ohio.
Vice-President—GUY POTTER BENTON, president of University of Vermont....Burlington, Vt.
Secretary—C. A. DUNIWAY, president of University of Wyoming.....Laramie, Wyo.

FIRST SESSION—WEDNESDAY AFTERNOON, JULY 9, 1913

The opening meeting of the Department of Higher Education was called to order in Barratt Hall, Salt Lake City, Utah, at 2:30 P.M., by C. A. Duniway, president, University of Wyoming, Laramie, Wyo.

The following program was given:

Topic: The Administration of Higher Education

"The Functions and Limitations of the Governing Board"—Edwin B. Craighead, president, University of Montana, Missoula, Mont.

"The Functions and Limitations of the President"—C. A. Duniway, president, University of Wyoming, Laramie, Wyo.

"The Functions and Limitations of the Faculty"—Paul H. Grummann, professor of modern German literature, University of Nebraska, Lincoln, Nebr.

Discussion: Joseph Swain, president, Swarthmore College, Swarthmore, Pa.; Edward D. Eaton, president, Beloit College, Beloit, Wis.; Dean Norton, Pomona College, Claremont, Cal.; Huber W. Hurt, president, Lombard College, Galesburg, Ill., and others.

The following Committee on Nominations was appointed:

Edward D. Eaton, president, Beloit College, Beloit, Wis.
William J. Kerr, president, Oregon Agricultural College, Corvallis, Ore.
Ellen C. Sabin, president, Milwaukee-Downer College, Milwaukee, Wis.
C. A. Duniway, president, University of Wyoming, Laramie, Wyo.

Huber W. Hurt, president, Lombard College, Galesburg, Ill., then read a paper entitled "The Vocational Motive in College."

Discussion: Ellen C. Sabin, president, Milwaukee-Downer College, Milwaukee, Wis.; James M. Hamilton, president, Montana State College of Agriculture and Mechanic Arts, Bozeman, Mont.; Edward D. Eaton, president, Beloit College, Beloit, Wis., and others.

After the discussion the meeting adjourned.

SECOND SESSION—FRIDAY FORENOON, JULY 11, 1913

The meeting was called to order at 9:30 A.M.

Ashley Van Storm, professor of agricultural education, University of Minnesota, Minneapolis, Minn., read a paper on "The Relation of the Agricultural College to the State Normal School."

Discussion: James M. Hamilton, president, Montana State College of Agriculture and Mechanic Arts, Bozeman, Mont.; Dean Merrill, University of Utah, Salt Lake City, Utah; William J. Kerr, president, Oregon Agricultural College, Corvallis, Ore; C. H. Lane, specialist in agricultural education, United States Department of Agriculture, Washington, D.C., and others.

The Committee on Nominations reported as follows:

For *President*—C. A. Duniway, president, University of Wyoming, Laramie, Wyo.
For *Vice-President*—William D. Hyde, president, Bowdoin College, Brunswick, Me.
For *Secretary*—Nathaniel Butler, professor of education, School of Education, University of Chicago, Chicago, Ill.

The report of the committee was accepted and the officers declared elected.
The meeting then adjourned.

C. A. DUNIWAY, *Secretary*

PAPERS AND DISCUSSIONS

TOPIC: THE ADMINISTRATION OF HIGHER EDUCATION

THE FUNCTIONS AND LIMITATIONS OF THE GOVERNING BOARD

EDWIN B. CRAIGHEAD, PRESIDENT, UNIVERSITY OF MONTANA, MISSOULA, MONT.

The development of higher education in America during the past quarter of a century has no parallel in history. In no other country have private citizens lavished upon universities so many millions for equipment and endowment. In no other country have universities received from state or national governments so many millions for maintenance. The annual income of Columbia University is greater than the combined incomes of Oxford with her score of colleges—Oxford with a thousand years behind her, the great national university of England. The University of Illinois, which twenty-five years ago was scarcely the equal in income or equipment of a first-class agricultural high school of the present day, has an annual income far greater than that of the great national university of Germany, at Berlin, an income greater than that of the Sorbonne—in short, an income far greater than is claimed for any of the ancient and famous universities of the Old World. More money—one may venture to assert, the figures are not at hand—has been spent upon buildings and equipment for the University of Chicago during the past fifteen years than has been spent upon the buildings and equipment for the University of Bologne thruout its thousand years of history.

But after all, vast endowments and stately halls of granite or marble do not make a university. A real university is the creation of great men. Only in an inspiring environment which lures to it real scholars and thinkers may a great university be created or maintained. The finer spirits of the republic of letters will shun and hate the stifling atmosphere of a university, no matter how vast its endowment or how splendid its buildings, that does not give to its professors a feeling of security and of freedom.

Does the American university offer to its teachers such an environment? Some doubtless do, the vast majority unquestionably do not. In no other

civilized country have the great scholars and teachers so little influence in university administration. For many centuries Oxford has in the main been governed and administered by the thinkers and scholars and teachers within her own walls. In America the university is governed and unfortunately sometimes actually administered by men whose "life-activities lie outside the realm they rule." "The very idea of a university as the home of independent scholars," says Professor Creighton, of Cornell, "has been obscured by the present system." "The disastrous effect of the system," says Professor Jastrow, of the University of Wisconsin, "is blighting the university career." "It is one of the most productive of the several causes," says Professor Ladd, of Yale, "which are working together to bring about the degradation of the professorial office." "If the proper status of the faculties is to be restored, if the proper standard of educational efficiency is to be regained, there must be," declares Mr. J. J. Stevenson, "a radical change in the relation of the teaching and corporate boards." Says Professor Munroe of Columbia University:

> Unless American college teachers can be assured that they are no longer to be looked upon as mere employees paid to do the bidding of men who, however courteous or however eminent, have not the faculty's professional knowledge of the complicated problems of education, our universities will suffer increasingly from a dearth of strong men, and teaching will remain outside the pale of the really learned professions. The problem is not one of wages; for no university can become rich enough to buy the independence of any man who is really worth purchasing. Young men of power and ambition scorn what should be reckoned the noblest of professions, not because that profession condemns them to poverty, but because it dooms them to a sort of servitude.

"Whatever organizations may be necessary in a modern university," declares President Schurman, of Cornell, "the institution will not permanently succeed unless the faculty as a group of independent personalities practically control its operations."

These protests are made not by sore-headed, dyspeptic men whose principal business in life it is to growl and snarl, but by sober-minded, patriotic men, some of them the great scholars and thinkers of the nation. My own experience as a college executive confirms the opinion that the university career is becoming more and more repulsive to men of real ability. More and more, also, our brightest students are turning from the teaching profession to enter the more independent and the more lucrative professions of law, of engineering, of medicine, of farming, and of business. More and more students of mediocre ability, the wooden fellows without initiative or courage, are they who, subsisting upon scholarships and fellowships, turn toward the university career and work for the higher degrees. To become a Ph.D. appears to be the sole ambition of large numbers of them who, when the degree is won, seem satisfied to rest upon their laurels thruout the remaining years of their lives. Of course rare and splendid exceptions there are, but more and more are able young men scorning the teaching profession as fit only for women and effeminate men. It has been

humorously said that in the schools of the future, yea even in the universities, real men teachers will not be found except here and there a stuffed specimen in the university museum.

What, then, is the matter with the university? Scores of able men, whom I much admire, would lay foul hands upon the university president as tho he were the cause of our academic slavery. They denounce him as an autocrat and a tyrant who, having seized every prerogative that he did not find nailed down, "holds a Damascus blade over other men's lives, careers, reputations." They would see the "presidential office shorn of its unwise and unsafe authority," of its "limelight conspicuousness," of the "foolish and increasing pomp and circumstance" which usually and increasingly attend presidential installations and, in vulgar eyes, transform wire-pullers and gumshoe educators into great men and commanding figures upon the educational horizon. They would reduce his salary to that of an ordinary professor, have him live in a house not bigger nor better than the houses of his colleagues.

It is doubtless true that some men, possibly many, have become college presidents not because of their merit, but because they are skillful politicians or successful wire-pullers, and it is also true that such men, when once they get into office, usually employ the methods of politicians and bosses. Such men build up a machine, gather around them a body of time-servers loyal to the administration, who also help to create for the real scholars of the university a chilling and forbidding atmosphere. But let us not forget that they are the creatures, not the creators, of a system that threatens, unless reformed, to turn over the temples of learning to educational gamblers and money-changers, to bosses and politicians, to all the foul and loathsome creatures who, while "cowering to those above them, always trample on those beneath them"—I mean the system that places in the hands of an external, irresponsible board the power to govern and to control in minutest details a great seat of learning.

Before I proceed further let me declare as emphatically as may be that the vast majority of trustees whom I have known, I esteem as generous and upright men. It is the system, not the individuals, that I am attacking. May we not hope that President Pritchett of the Carnegie Foundation may get one of the really great educators of the world, or perhaps a committee of such educators, to write an authoritative bulletin on "The Functions and the Limitations of the Governing Board," and place it in the hands of every school trustee in the land? Such a bulletin, if widely read and studied by the great mass of thoughtful people, would do more for the cause of university education than the gift of millions to endowments. Indeed it may be confidently affirmed that the greatest single problem that concerns the American university is the problem of securing competent administrators.

The chief function of a university board is to resign if they find themselves incompetent or unable to do the work intrusted to them. If, however, they consider themselves competent, they should see to it, when vacancies occur, that they be filled by men intelligent enough and high minded enough and patriotic enough to govern wisely a higher educational institution.

It is true that back of the governing boards in state universities are the people who create the boards, or, as has happened in more than one state of the Union, the people who create the bosses who create the governors who create the boards. In the strictest sense the people in a democracy are the sources of power, and upon the people, in the last analysis, must fall whatever of glory or of shame is connected with their university administration. But since it is not possible to hold a whole people responsible, we must turn to the men they intrust with authority, the trustees.

What limitation shall be placed upon the governing board? Almost none whatever if it be a good board. What, then, is a good board? A good board is composed of a body of men, whether large or small, who have at least two qualifications: (1) plain, old-fashioned honesty and horse sense; (2) technical knowledge, whether acquired in or out of the university, sufficient to call to their service competent experts, and to sift the advice of these experts, and, when this is done and only then, to inaugurate right movements and wise policies, and to reach conclusions in the solution of the delicate and difficult problems that continually face such a board. The besetting sin of the university board is that they either do not know how, or, knowing how, are too cowardly, to call to their service the best educational experts. Hopeless beyond any possibility of redemption, the board that does not know that while they may govern, they cannot administer, the university. That belongs to the faculty and to the faculty alone.

Many illustrations are at hand. Just before leaving home I had a letter from a well-trained teacher, which, as nearly as I can remember, reads as follows:

> I am seeking a position in another school for the same reason that induces forty of our professors and three heads of our state institutions to look for positions elsewhere.

In that state, politicians on the board and off the board have so long tinkered with the state institutions and so long harassed the professors in them, that good men can endure it no longer except under the compulsion of stern necessity.

Take another illustration. Only a few weeks ago an old friend wrote me as follows:

> For God's sake help me if you can. For years I have been harassed to distraction by this ignorant, conceited, crooked board. I am not merely on the brink, I am in the very middle, of hell itself.

That man is an educator, an M.A. and a Ph.D. of a great American university.

Take another. Not long ago the president of a well-known state university said to me that he had decided to resign his position, giving as his reason the constant interference of the board in matters that seem to him to belong to the faculty. He pointed out many instances of this interference. One member of the board, a lawyer and a college graduate, one day tossed before him a big bundle of papers with the remark:

> The faculty has been giving a good deal of time to courses of study. I have taken up the matter myself. The other day I went down to my office, took off my coat, and worked for four hours preparing a curriculum for each department of the university. Here it is and I expect you to put it thru.

It is really amazing how dependent our universities seem to be upon the legal fraternity. I am making no brief against lawyers—the best board member I have ever known was a lawyer, but he was a big one, a great jurist, a profound scholar—but lawyers as a class are usually the worst men on boards because they love to split hairs, whereas big business men are the best because they are accustomed to do big things.

What president of long experience has not encountered the *nouveau riche*, the parvenu who, regarding the impecunious college professors as mere hirelings, as mere dirt and rubbish, undertakes to establish policies to prevent raise of salaries and thereby to place the institution upon a sound financial basis. Sometimes, tho rarely, one encounters the business man who, feeling how successfully he has conducted his department store or factory, begins at once to apply factory methods to the delicate and intricate, the high and holy work of a great educational institution.

But there is another type of men sometimes found on university boards, which I cannot adequately describe because of the limitations of the English tongue, and the refinement and culture of my audience. He is the pinhead. While great men become modest when vested with vast power or supreme authority, the pinhead, altho he may be honest, altho he will neither lie nor steal, is likely to become the very oracle of wisdom as soon as he finds himself settled for life on a self-perpetuating board. Low browed, thick headed, sometimes the holder of a college degree, now strutting like a peacock, now looking wise as the owl, an indomitable fighter, he baffles the genius and the ingenuity of the ablest executive. The intelligent ward boss or the politician of big dimensions, no matter how crooked, is not quite so bad a man on a university board as the miserable little pinhead who is to me what has been described as "the veritable black beast in the academic jungle." When thrown into conflict with such a man there is nothing for the president to do but to hold up his hands and to pray without ceasing that the giver of all good things may bountifully bestow upon him the saving sense of humor, without which even the ablest university president must find the academic world a cold and cheerless place.

The road that leads out of these deplorable conditions is perhaps a long and rocky road, but we must find it and make our way out to a freer air, a happier environment, or else the very life of the university as an acropolis of culture, as the stronghold of the "great and lonely thinker," as the nursery of noble and heroic souls is absolutely doomed. University boards cannot longer afford to ignore the faculties. In all large questions of university administration, the faculty should have a hearing and a voice. To give to the faculties the control that belongs to them, to create both for students and professors a happier environment, is, after all, the high duty of administrators. I have an abiding faith in the outcome. To all brave souls who are growing weary and faint-hearted, let me commend the words of Carlyle:

> It is our duty to do the work that God Almighty has entrusted to us, to stand up and fight for it to the last breath of our lives.

The work of establishing and administering a university calls for the united efforts of faculty and board and alumni, who should work together in mutual trust and esteem for the up-rearing of a real university, the most potent instrument that man has yet devised for his own advancement, for the enrichment of his life, for the development and diffusion of knowledge, and for "the enlargement of the boundaries of the human empire to the attainment of all things possible."

THE FUNCTIONS AND LIMITATIONS OF THE PRESIDENT

C. A. DUNIWAY, PRESIDENT, UNIVERSITY OF WYOMING, LARAMIE, WYO.

This paper is meant to be a condensed statement of certain practical working principles which seem most useful in our present-day state universities. Let me systematize my treatment of the theme by viewing the activities of the president on the basis of the parties with whom he must deal. He must act for and with a board of trustees, by whatever name they are called. He must work with his colleagues of the faculty. He must deal with students and the student body. He must be an institutional representative before the community.

In his relation with a board of trustees the president should have, and usually has, dual capacities as fellow-member and as a managing director. By virtual co-optation the appointed or elected board members bring into their body an associate. They give him a tenure of office different from their own and determined by themselves. Their intention and hope usually is that each new president may be the most permanent member of the board, sharing as an equal the general responsibilities which the board as a whole must bear. Sometimes he is a non-voting member, but with full rights of initiating and discussing proposals on which his associates must decide. Inasmuch as the president is also the active managing director

of the entire university, the only member of the board (except in some recent interesting and dubious examples in certain states) who receives a salary for devoting his whole time to university business, he is justly responsible for definite leadership in practically all phases of business before the board. He does not, and should not, expect his associates to obligate themselves to ratify his recommendations. He expects them to require of him adequate explanations for understanding the significance of proposals put before them. Upon frank discussion and candid consideration by those having ultimate responsibility, the president will be ready to withdraw recommendations or to suggest that postponement or further investigation is desirable. But just because he is rightfully held to responsibility as a virtual managing director, he alone among board members is given the right of formal initiative in internal administrative questions. Herein, however, the president will have an open mind to welcome and consider suggestions from his associates on problems in which all share responsibility, even when the others defer to him as an expert with most immediate responsibility. He must respond to the board's expectations that his experience, his educational training, his acquaintance with the whole state, his practical wisdom, will enable him to contribute most effectively to the solution of large questions of policy, to be the largest factor in determining external matters. But in such questions as the appointment and promotion of members of the faculty, the apportionment of available funds for salaries and departments in a balanced budget, the unqualified right of initiative by the president (so far as relations of board and president are concerned) is one of his functions most necessary to success in administration. The president can, and does, deal with these particular problems more adequately than any other member or any committee of the board. He can, and does, represent both the point of view of general policy and the interests of his colleagues of the faculty. If the board cannot respect the president's initiative in these matters, if the results of his recommendations and their general reliance on them are clearly detrimental, the removal of the president will be justifiable if he is not willing to resign when advised to do so.

The relations of the president and the faculty are peculiarly intimate. They share a common daily life of scholarship, of instruction of the young, of disinterested intellectual and scientific service for the whole community. If he has been wisely chosen, he is a sympathetic leader, appreciative of the ambitions and needs of his colleagues of the faculty. Except as individuals may be markedly selfish and too deeply absorbed in their immediate interests, they will loyally tender him advice and help in his difficult problems. Thus neither president nor faculty is conscious of dependence or autocratic power. The president scrupulously respects legislative functions of the faculty or appropriate divisions of it in departments, schools, or

colleges. The faculty regards the exercise of administrative authority corresponding to executive responsibility as beneficial. The president does not seek to impose his will on committees, the conduct of departments, schools, colleges, or the whole faculty—he is but a persuasive leader, not a military commander or a shop boss. Decisions of the faculty, or of any of its divisions, on legislative questions, the president loyally executes, even when he dissents from such decisions. The faculty initiates and urges upon the president measures for its several departments and for the common good—and such advocacy is sought by the president and communicated to the board for considerate attention, even when not approved by him. Presidents know that success comes from measures that are justified on full consideration and not "put thru" by secrecy and manipulation. Whether the faculty elects, or the president appoints, committees is a question of little importance—because vital relationships make either system work well. Whether salaries are fixed on an automatic scale based on academic rank and years of service, or vary with the terms of special contracts or the president's estimates of merit and financial necessity—is again a subsidiary question and for a like reason. Whether other representatives of the faculty than the president may accompany him to deal with the board is also a secondary question—because the president and the faculty are zealous coworkers, not jealous antagonists.

This necessarily brief and imperfect paper will not analyze the functions and limitations of the president with relation to students, alumni, or the public. It is limited to discussion of interrelations of board, president, and faculty, for the purposes which seemed to be contemplated by the organizer of our program. A different method might have led to analysis under appropriate grouping of the categories of the president's duties. As a responsible executive officer he has leadership and more or less of determining influence on questions of finance, of faculty personnel, of internal educational policy, of general public educational policy. He is also expected, with the help of his wife, to sustain arduous social duties, both within and without the institution, dealing graciously with every divergent and even antagonistic element of our social fabric. Permeating all his life and work must be a spirit of devoted scholarship, compounded of a love of learning for its own sake and a consecrated purpose of highest public service.

Finally I hope that I have made clear my most essential conviction, which is that the human factor rather than doctrinaire legalism should give character to our discussions and our schemes of administrative organization. Equally when a member of a faculty, and in more recent years as a university president, I have believed in the principle of centralization of responsibility and adequate authority for the solution of problems of university control. Whatever may be best for denominational and private endowed institutions with boards responsible to no one so long as trustees

are "law honest," our public universities, with their dependence upon popular electorates and political action, need legal centralization of responsibility and authority. Such a legal system will then be suffused by a spirit of co-operation among colleagues in a common loyalty to the public good.

THE FUNCTIONS AND LIMITATIONS OF THE FACULTY

PAUL H. GRUMMANN, PROFESSOR OF MODERN GERMAN LITERATURE, UNIVERSITY OF NEBRASKA, LINCOLN, NEBR.

Our dilemmas in administration are to be traced largely to old traditions which we have failed to eliminate or modify in accordance with our changed conditions. We have taken the traditions of the old colleges that had a prescribed course. The faculties of these colleges had been educated in a uniform manner and, barring the personal equation, each member of such a faculty was as competent as any one of his colleagues to enter into the business of administration. It was quite natural therefore that the small faculties of a generation ago should gather around a table and dispose of any and all administrative business. The college grew into the university under the influence of German traditions, which precluded a strong administrative force on the ground that a university is purely a company of scholars. Here the first serious blunder occurred, for the universities of our land were largely preparatory schools and their faculties consisted in a large measure of men who had not acquired scholarship in any vital sense. The direct result was that the faculties of these new institutions continued to do administrative work of all kinds instead of devoting themselves to the disciplines which they were supposed to represent. They built up personal machines instead of departments of teaching and investigation. Cognizant of the fact that in German universities the faculty elects new faculty members, they virtually insisted upon a similar right, with the result that continued inbreeding has led to wholesale degeneration. Our universities thus administered by the traditions of the small college and the German universities are in effect oligarchies. Individual institutions developed from oligarchies into absolute monarchies, all of the power being centered in the president. Sometimes this was enlightened despotism, sometimes it was unenlightened.

The tyranny of the oligarchy and the tyranny of one-man power can be obviated, in my opinion, only by a reign of law which will secure definite rights for the professor in a limited province instead of the chance of plunder in the whole realm of the university. Once upon a time we had authority in all university matters; now we must relinquish much of this authority in order to obtain conditions which will enable us to do our departmental work effectively. We are therefore ready to consign a large number of purely administrative functions to deans and presidents, whose duty it

is to test our efficiency and to sit in judgment in all interdepartmental matters.

Here first of all belongs the business of registration with all that concerns it, and we must realize that the authority of the registrar's office is to be respected. The individual faculty member may propose a program of recitations, but the administrative branch must reserve the right to adjust this program in the interests of the university at large. When the registrar's position is accorded that autonomy and respect which it should have, we shall see a marked improvement in our university life. Expert service in this connection will lead to a scientific arrangement of our classes, an arrangement that will utilize most advantageously the time of the students and the teachers. As a part of the administrative force of the institution this office should become a wholesome check upon the faculty. The professors who fail whole classes and those who mark all of their students 95 per cent should hear from this office directly or indirectly. In a word, the registrar should be the statistician of the university. He should not only record credits, but should be able to synthesize the facts that come before him. His office should be the source of a large amount of legislation enacted by the faculty at his suggestion.

Whenever the faculty encroaches upon the province of the registrar confusion is liable to arise. Members of the faculty cannot be induced to inform themselves thoroly concerning the details of registration; hence much time is lost and many mistakes are made. We readily concede that the librarian must have a trained corps of attendants, but we too often fail to realize that the registering of students is quite as important as the registering of books.

The official advising of students should not be assumed by the faculty. President Eliot clearly hinted at this evil when he declared that it is the business of the adviser to interpret the rules of the university as printed in the catalog. Even this is a compromise. The faculty member should not advise the student in an official capacity at all. He is an interested party. In these days of counting noses he is interested in the size of his classes and the classes of his friends on the faculty. Departmental advisers are subject to the same criticism. In the old days, when a department was represented by one man, the system was less objectionable. Today, when large departments contain a dozen professors, personal official advice enables the adviser to discredit the work of his colleagues. The department has a right to lay down departmental requirements, but the administrative force should enforce these requirements.

In the days of small faculties, student affairs and delinquency could be regulated at the faculty board. Later this function passed to a committee of the faculty. Today it is clear that this work has become purely administrative and calls for experts. In the hands of such experts the work can be done better than a general faculty can possibly do it, for the general

faculty has no special training in tracing the manifold causes of delinquency, nor will it take the time to gather the necessary information. Few of its members could discern physical and mental peculiarities which the specialist recognizes at once if he is efficient. Simply because faculties have been so slow to delegate this part of their authority, universities have lagged behind public-school systems in the rational treatment of the individual student and in the introduction of hygienic measures.

Faculty committees have, on the whole, been inefficient in their work because they have been appointed by the faculty. When these committees fail to do their work efficiently they cannot be removed without seriously disturbing the equilibrium of the faculty. The administrative branch, forever under the check of faculty opinion, can act when the evidence has been presented to it. In spite of some good arguments presented in favor of faculty election by Dean West in a paper before the Association of American Universities at San Francisco on March 17, 1906, I am inclined to agree with President Eliot, who favors administrative appointment. Dean West assumes that faculty election of committees promotes the responsibility and dignity of the faculty. But he does not seem to recognize that in large faculties a small group of men generally assumes control of committee appointments by methods not unlike those of the ward politician. Even if faculty appointment is conceded for committees exercising legislative or instructional functions, it is clear that all administrative committees should issue from the chief executive who is responsible to the board and the public for their efficiency.

By a prudent surrendering of administrative functions, we are in better condition to maintain our authority on the legislative side, but in the nature of the case we must also be prepared for limitations here. Every faculty is the creature of a corporation or a state exercising its authority thru a board. The corporation or board may, upon its responsibility, lay down general rules which must be accepted during its tenure. For example, a state university faculty insists upon certain entrance requirements. The high schools commissioned under the state laws have another standard of graduation. Under these conditions the board of control must naturally supersede the faculty if it is necessary to do so in order to make the university articulate with the state school system.

In the formation of their own courses of study college faculties have been unwise. They will be forced to improve on their present methods or suffer an administrative check in this direction. In the words of David Starr Jordan, "A faculty is a body of men each of whom believes that a maximum of his own subject is vital to the welfare of the student." If our faculties had had absolute control of the courses of study, our universities would still be colleges of the liberal arts. All of the newer activities would have been crushed at the outset. In order to leave the formulating of courses in the hands of the faculty, the boards have resorted to the expedi-

ent of creating special faculties who are willing to formulate special courses. These again must remain under administrative control in order to safeguard the integrity of the whole institution.

In spite of all these limitations which seem to have some claims of plausibility, the authority of the faculty may be by no means negligible. It maintains authority in matters of instruction and research. If it acts wisely, it will keep the authority to legislate in all matters touching these two fields.

It is a fallacy to suppose that the professor's status must necessarily suffer because he relinquishes general administrative functions. It is true that the general faculty affords him a smaller sphere of activity than formerly. But he should find ample opportunity to exercise his initiative in the departmental councils, for the members of a department should have quite as much to discuss as any general faculty of the last generation. Under such conditions the head of the department becomes its real instead of its official leader.

It seems quite clear, then, that with the growth of our institutions a large number of purely administrative functions become divorced from the faculty. This is necessary if the student is not to be made the victim of teachers engrossed in departmental instruction and research. In the past, especially in small institutions, this administrative side has been centered in one man, making his position extremely precarious—unnecessarily so. The number of careful and high-minded executives sacrificed to this situation is a blot on our higher education. One is almost tempted to say, "Let us cease talking about academic freedom for a while and give some attention to the question of administrative rights." Not infrequently the college administrator has been forced to resign just at the time when he has succeeded in gauging the efficiency of his faculty. The new president spends a number of years informing himself, but when he becomes efficient, the tangle of administrative responsibility again removes him. The trustees are not an adequate protection for him, for the personnel of the board is continually changing and the members of the board are accessible to the faculty members who have personal influence. The only adequate protection for the president lies in developing an administrative body in the university, each member of which has a definite field and definite responsibility. Such a body need not be chosen primarily for its ability in research. It should be a real university senate chosen by the president and regents on the basis of fitness. The appointment of deans has too frequently been based upon the desire to increase the salary of a worthy teacher or investigator who has no taste and no talent for administrative detail. In this connection it may be well to recall the statement made by Dean West in the address to which I have already referred.

He asks:

> How many members of general faculties and senates are at all in touch with our literature on college administration and instruction?

Is it necessary that they should all become vitally interested in this literature or will it suffice to specialize our efforts and build up efficient administrative departments?

In the division of functions there is a certain danger, if the proper checks are not maintained. The faculty that restricts itself to legislation must have some assurance that its legislation is carried out. To this end it should maintain committees. I have already suggested that the faculty should not be officially concerned with the student during registration. I do insist that it is legitimate for the faculty to maintain a committee which will check all registration blanks. Professors should not deal personally with the student at all, but they should satisfy themselves that the administrative branch has done its work correctly.

A clearer differentiation of functions will lead not only to greater efficiency, but to greater freedom as well. For freedom has the peculiarity of applying to all persons concerned: to the student, who wants to know his duties and his privileges, to the public which has its rights, to the state which has its claims, to the teaching force, low and high, even to the president who must have the freedom to dismiss an inefficient professor without fearing that he will be forced to resign on trumped-up charges that have no connection with the matter in hand.

THE VOCATIONAL MOTIVE IN COLLEGE

HUBER W. HURT, PRESIDENT OF LOMBARD COLLEGE, GALESBURG, ILL.

Shall college be considered an end in itself or a means toward some definite, deliberately chosen end? The traditional point of view and curriculum assumed that four years of general college training were, if not essential, at least most desirable. The assumptions of our vine-clad past have of necessity been challenged by the spirit of an age of efficiency.

Even religion today is nothing if unrelated to life and conduct. It is a working attitude toward life. It has focused its attention increasingly less on a remote hazy future and more on service and life in a great, throbbing, needy, immediate present. Practical, useful religion!

In education the demands of effective life are no less imperative. Education must be related to life in a concrete way. The growth of laboratory science has been an aspect of this demand. The drawing, manual training, domestic science, and vocational interests represent a newer phase of this old need of real preparation for life.

Our old "one-course" high-school curriculum permitted no differentiation in the high school, and the old college curriculum, with its excess of ancient humanities, permitted none; hence the young man who sought to enter something besides the ministry or perhaps the law found himself more or less astern at college graduation. Today the differentiation should

come at an increasingly earlier period to meet the demands of effectiveness essential to successful competition.

All our better high schools are doing more and more of differentiated work so as to eliminate human waste, and this demand has been only partially heard by the college. The university has been a distinctively vocational school but the conservative small college has persistently allowed its students to browse contentedly on the foliage of general culture and has not confronted them systematically with the problems of life. The awakening often did not come until July after commencement, when they have had to start out and face a needy world with some service which they should have been prepared to render.

The "Lombard Idea," which it has been my privilege and responsibility to organize, is a definite program to combat the following type of experience. Some months ago I was invited into the state of Iowa to an excellent old college to speak about the trade schools in Germany, which I have just investigated under the auspices of the Carnegie Foundation. At the close of the address a half-dozen young men crowded down to the front of the auditorium and asked for an interview. We talked until after 2 A.M. about their problems. Do you realize that those half-dozen Seniors with at least eight years of grade-school training, with at least four years of high-school training, with at least four years of college life, had no more idea what service they were to render society than they had the day they entered? They said: "No one has ever talked to us about it," and I spent half the night helping those promising young men of twenty-odd years plan their tomorrow intelligently and deliberately. Sixteen years of training under the flag of the philosophy of "I don't know where I'm going but I'm on my way!" How much richer might those years have been had there been the dynamic power of a clear-visioned purpose directing them.

The "Lombard Idea" meets this condition in two ways: first, by relating the work in every department to what that line is doing outside the four walls of the classroom. My professor of chemistry, Dr. Cooper, is city chemist of Galesburg, my professor of bacteriology, Dr. Winter, cooperates with the city health department in the detection and prevention of epidemics, etc.

Into every department has this organizing influence gone. Few hours of intensive work, not extensive, are expected of the professors in their teaching with the further expectation that theory shall, in every conceivable way, be related to actuality. That's the idea! It meant an entirely new faculty but it is done. College work related to life. Secondly, vocational guidance with the entering student that his college work may prepare him to render *broad* effective service in *some definite* field. The results have been astonishing. Related, correlated courses have had to be organized to meet these needs. Enrollment, faculty, expenses, equipment, and buildings have doubled inside of twelve months, and we

scarcely can find space to take care of the students who are interested in *purposeful* college work.

The traditional curriculum assumed that there were certain sacred values inherent in and peculiar to each subject. Modern psychology insists properly that training is specific, not general, hence the vital test of what courses, what shall be in them, to whom shall they be given, and in what sequence becomes a matter of individual and personal inquiry. The answer depends entirely on what the individual proposes doing with the one life he has to invest.

Some will suggest that the youth cannot decide until after college. That idea is the curse of the vertical stratifications in American life. A casual perusal of any book on child psychology, Hall's excellent works, or unfettered observation can prove to you, physiologically and psychologically and socially, that the vocational motive arises spontaneously in consciousness at the time of puberty and that from that time on the most intelligent guidance and planning is essential to secure largest results from a life.

A vocation arises only in response to some human need that must be met. And our "jobs" are the opportunities which a great Infinite has given us to influence the world and make it better because of our lives in it. What we need in all education is not a separation of idealism and vocation, but the taking of the highest idealism into the daily job, radiating confidence, hope, good cheer, love to all. If life is better because of us, our job is our only chance to achieve it. Dr. Georg Kerschensteiner has shown clearly the relation between *preparedness*, *joy in work*, and *efficiency*. Do we dare to fail to heed his vision?

Let us insist in our college life upon there being a central direction about which our general knowledge and experiences may be organized—not mere narrow specialization, but as much specialization as possible during the four years—meanwhile coming into broad contact with the other great bodies of organized human experience.

Let us keep in the foreground the three necessities—something to do, something to love, and something to hope for, and do all in our power to prepare our men and women to live effectively and purposefully.

THE RELATION OF THE AGRICULTURAL COLLEGE TO THE STATE NORMAL SCHOOL

A. V. STORM, PROFESSOR OF AGRICULTURAL EDUCATION, COLLEGE OF AGRICULTURE, UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINN.

Since this is the age in which society is accomplishing more of her work thru institutions than has ever been done before, it is pertinent to inquire into the efficiency with which society's institutions are performing society's work and meeting society's needs.

The marvelous increase of interest in scientific agriculture which has

marked the last few years has made increasingly great demands upon the colleges of agriculture to which they have with sincerity and earnestness conscientiously endeavored to respond.

The latest demand—that agriculture be taught in all the public educational institutions from the rural school to the college—has brought to the front for consideration the relative responsibilities of the state normal schools, whose duty historically is the preparation of teachers, and the colleges of agriculture, whose duty historically is, among other things, instruction in agriculture.

If our public institutions adjust their plans to meet properly these needs, it means that some clear, sound, unbiased thinking be done and that it be done promptly.

This paper will deal with the relation between these two classes of institutions in the preparation of teachers as mainly an administrative, and only incidentally as a pedagogic, subject.

From the writer's experience, both instructional and administrative, in elementary, secondary, and collegiate institutions, the problem is not particularly complex or involved and, if you see it from his point of view, it can be treated rather briefly.

As to the point of view from which this paper is written, let us state at the outset some fundamental principles which have been quite generally, if not universally, accepted as established.

First: That both state normal schools and state colleges of agriculture are expected to contribute their portion to the general educational improvement of the people.

Second: That the special field of the state normal school is the preparation of elementary teachers.

Third: That those who are to teach in secondary and higher educational institutions should be prepared for teaching their special subjects in colleges or universities.

Fourth: That it is the duty of the state college of agriculture to educate men for all those positions which require an extended knowledge of scientific agriculture.

The next pertinent inquiry is: "What teachers need a knowledge of agriculture?"

Omitting any discussion of the proposition that every teacher needs some familiarity with agriculture as the greatest and most important national industry, we shall confine our attention to those teachers for whom it is desirable to be prepared in agriculture in order to teach it, viz.:

1. Rural teachers.
2. Grade teachers.
3. Special teachers of agriculture in high schools, normal schools, and other secondary institutions.
4. Special teachers of agriculture in the non-agricultural colleges.
5. Teachers of special agricultural subjects in agricultural colleges.

From what has been said it is readily deduced that the first two classes of teachers enumerated, namely, rural teachers and elementary grade teachers, should receive their preparation in agriculture in the state normal school, and that all the other classes enumerated should be prepared in agriculture at the state college of agriculture.

That these conclusions may rest on some other foundation than the mere dogmatic statement of the writer, let us consider some of the reasons therefor to be found in the fundamental conditions inherent in the two classes of institutions as found in most of the states of the Union.

Reasons for rural and grade teachers obtaining their preparation in agriculture in state normal schools.—First: The state normal school is the best place for the rural and grade teachers to procure the training in their other work; they will not attend here to get most of their training and then go elsewhere to get their agricultural work. Consequently, whatever agriculture is taught them must be given them at the state normal school.

Second: The agriculture they need is general, elementary (elemental) agriculture, and in method of presentation harmonizes with the methods used in other elementary subjects, in which methods state normal schools are especially expert.

Third: The vital correlations that ought to be established in the public-school curriculum between the elements of agriculture and the other studies of the elementary school should be established in the mind of the teacher at the time she is receiving her normal training in these elementary subjects.

Fourth: The apparatus and equipment necessary for the teaching of elementary agriculture is comparatively inexpensive, and, as much of it will already be a part of the elementary science equipment of the state normal school, little additional expenditure of funds will be required.

Fifth: A large number of specialists in the various fields of scientific agriculture is unnecessary in the normal school because of the elementary character of the work to be given, thus making it possible to give a good elementary course with a limited number of instructors if they be well prepared.

Sixth: The amount of time that can be devoted to agriculture in the course of the elementary teacher is so small that advanced, widely differentiated, highly technical courses could not be taken even if the normal school were prepared to offer them.

Seventh: The manner of presentation of elementary agriculture to grade pupils is so different from that used in agricultural-college classes at the present time that a quite complete rearrangement of material is necessary to adapt it to use in elementary schools. This rearrangement and harmonious adaptation should be made by the normal-school instructor, who has the technical knowledge of agriculture gained from a course in the college of agriculture, and the technical knowledge of elementary-

school needs gained from a course in the normal school and from public-school experience.

Why those who are to teach agriculture in institutions above the elementary grades should be prepared in the college of agriculture.—All persons who are to teach agriculture in educational institutions above the elementary grades should receive their special preparation for teaching agriculture in the college of agriculture for reasons already given and other equally cogent ones as follows, viz.:

First: The subject-matter of the curricula of secondary and tertiary institutions of learning is necessarily so highly differentiated and specialized that a broad and deep technical knowledge of the subject-matter to be taught by the special teachers is one of the prime prerequisites in the preparation of such a teacher.

Second: That teachers of agriculture in secondary and higher institutions can procure this necessary preparation only in an institution properly equipped to give this technical education and training.

Third: That a large number of instructors technically prepared to teach the various branches of agricultural knowledge is necessary for effective preparation in modern scientific agriculture for any purpose.

Fourth: That just such a corps of instructors is necessary to give the proper preparation in subject-matter to the special teacher of agriculture who is to instruct in any educational institution above the elementary grades.

Fifth: That such a corps of instructors is already employed in the state college of agriculture and must continue to be so employed without regard to the need of the preparation of teachers in these institutions.

Sixth: The employment of another such large faculty of specialists in the state normal school merely to prepare specialists in agriculture would be a wholly unwarrantable duplication of forces by the state; but the same faculty of specialists now employed in teaching the subject-matter of agriculture to the other students of agriculture in the college of agriculture can be utilized in teaching this same agricultural subject-matter to prospective special teachers of agriculture.

Seventh: That the same reasons exist for not duplicating the expensive equipment of the present college of agriculture, such as hundreds of acres of land, large numbers of cattle, horses, hogs, sheep, and other live stock for breeding, study, care, feeding, producing, marketing, veterinarian, and other purposes; machinery and apparatus of various kinds, all of which are absolutely necessary for the proper preparation of all specialists in agriculture.

Eighth: The same reasons exist for not duplicating the extensive and expensive agricultural college experiment station with its technical problems of plant-breeding, care, development, varieties, origination; its equally technical problems of animal-breeding, care, feeding; its problems of soils, mechanics, etc.

Ninth: By the fundamental laws of their establishment and by subsequent growth, these colleges of agriculture and experimental stations are internally connected with the federal department of agriculture, and the future special teacher of agriculture needs the direct contact with these federal influences that come to him during his time of preparation at the college of agriculture and which conditions cannot be duplicated at the state normal school.

Tenth: The special teacher of agriculture, especially in the public secondary schools, is destined to become more than a classroom teacher. He must become, as he is fast becoming in some states, an agricultural adviser to the community, especially to the farmers. To meet this important situation he may be less of the schoolmaster but must be more of the scientific and practical agriculturist.

For this teaching of adults, the agricultural college with its equipments, its specialists, its extension work, its conferences, conventions, and meetings of various kinds participated in by both technicians and practical farmers, its literature of station and college, and all the other tangible and intangible influences that constitute its atmosphere are a necessity. No amount of expense and effort can develop these at the normal school whose traditions and purposes while equally important are entirely different.

The discussion so far has been from the standpoint of preparation in subject-matter because administratively, at least, that is the major problem needing solution.

While professional preparation is important, both quantitatively and administratively, it is the minor problem.

I do not wish to encroach upon the prerogatives of another paper of this program by discussing in detail the character of this preparation. However, if I were to make a quantitative division it would be about 10 to 15 per cent professional work, and the remainder divided between agricultural subject-matter, and the supporting subjects such as science, languages, mathematics, history, etc. Since the professional work is relatively so small in quantity and since it needs so little material equipment, is it not much more reasonable to convey the Mahomet of professional work from the state normal school to the college of agriculture, than to attempt to transport the mountain of agricultural subject-matter from the college of agriculture to the state normal school?

This method of solution seems to appeal most strongly to interested but unbiased persons who are responsible to states for the settlement of such questions, and we seem to be rapidly adjusting ourselves to this differentiation of duties between the two classes of institutions.

While in the main those desiring a teaching knowledge of agriculture will attend either the state normal school or the state college of agriculture according to the principles enumerated above, there are some positions the proper preparation for the occupancy of which can be met only by the

co-operation of the two institutions. Special teachers of agriculture in state normal schools and principals of consolidated schools are illustrations.

Neither the state normal school nor the agricultural college is prepared to give these men the all-round preparation they need, nor should either attempt it, but there should be such a co-operation between them that the student can get his preparation in both without loss of time in either.

The small tract of land which every normal school should have could hold such a relation to the state experimental and demonstration farms as to give it the benefit of counsel and advice from experiment station specialists.

The extension department of the college could be called upon to co-operate in developing that work in the normal school.

The students who go out from the normal school can be invaluable in furthering in their localities the agricultural plans of the state, whether they originate in the normal school, the agricultural college, the state department of education, or any other state agency.

With such a division each class of institutions will find opportunity for the exercise of all its ingenuity, initiative, and energy for several generations to come before it will meet in any adequate measure the demand within its own legitimate field.

The fields are so wide, the demand is so great, the division so fully in harmony with the traditions, the purposes, the equipment, and the atmosphere of each that no rivalry should ever exist between them.

If the form of this paper seems dogmatic, I trust you will not think the spirit is intended to be so. It has not been the intention to endeavor to place these matters beyond the possibility of a peradventure, but simply to set forth the situation with sufficient clearness that purposeful discussion may follow.

DEPARTMENT OF NORMAL SCHOOLS

SECRETARY'S MINUTES

PHILADELPHIA MEETING

OFFICERS

President—JOHN A. H. KEITH, president, State Normal School.....Oshkosh, Wis.
Vice-President—WILLIAM E. WILSON, principal, State Normal School.....Ellensburg, Wash.
Secretary—HENRY G. WILLIAMS, dean, State Normal College, Ohio University...Athens, Ohio.

FIRST SESSION—THURSDAY AFTERNOON, FEBRUARY 27, 1913

The Department of Normal Schools met in the auditorium of the Girls Normal School, Philadelphia, Pa., at 2:30 P.M., with President John A. H. Keith in the chair.

The meeting was called to order by the president.

John N. Adee, superintendent of schools, Johnstown, Pa., presented the first paper, entitled "The Shortcomings of Normal-School Graduates."

Before entering upon the discussion of this paper, the department by motion agreed to consolidate the second session with the first, because it was learned that several persons on the program of the Friday evening session could not remain in Philadelphia until that time.

The discussion of Mr. Adee's paper was opened by Cliff W. Stone, director, Training School, State Normal School, Farmville, Va.

At this point, general discussion on Mr. Adee's paper was suspended to hear the paper of Guy E. Maxwell, president, State Normal School, Winona, Minn., on "Differentiation of Courses in Normal Schools."

John W. Cook, president, State Normal School, DeKalb, Ill., then continued the discussion of Mr. Adee's paper.

H. H. Seerley, president, Iowa State Teachers College, Cedar Falls, Iowa, was reported absent, but his "Report of the Committee on Normal-School Statistics" was read.

President Maxwell's paper was discussed by John L. Alger, principal, State Normal School, Providence, R.I.; Frank W. Smith, State Normal School, Paterson, N.J.; John W. Kirk, president, State Normal School, Kirksville, Mo.; W. H. Kilpatrick, Teachers College, Columbia University, New York, N.Y., and others.

W. T. Carrington, president, State Normal School, Springfield, Mo., then presented a "Preliminary Report of the Committee on Normal-School Standards."

With an announcement by President Keith of the outline of the program for the meeting in Salt Lake City in July, and a most hearty greeting and welcome by William M. Stewart, principal, State Normal School, Salt Lake City, the meeting adjourned..

HENRY G. WILLIAMS, *Secretary*

PAPERS AND DISCUSSIONS

THE SHORTCOMINGS OF NORMAL-SCHOOL GRADUATES

JOHN N. ADEE, SUPERINTENDENT OF SCHOOLS, JOHNSTOWN, PA.

In preparing a paper upon this subject, at least three important facts must be taken into consideration if justice is to be done not only to the normal-school graduates, but also to the institutions which they represent.

First, the vast majority of the graduates of our normal schools are young, and, regardless of the breadth and thoroness of their training and preparation, are bound to have many of the shortcomings due to youthfulness and inexperience.

Second, native ability in some would make them succeed in spite of their training or lack of training, while the fullest possible preparation would not fit others to be proper teachers.

Third, there is a difference in the standard of the work and the degree of efficiency of normal schools situated in various parts of the United States and often in the same state. Hence shortcomings vary with institutions and it is difficult to make generalizations applicable to the product of all of them.

However, in spite of variations in the efficiency of different normal schools and the further fact that one school may be strong in some departments and weak in others, the question before us is: "Are there shortcomings more or less common to all normal-school graduates?"

To answer this question in a broader way than anyone can do from mere personal experience, I wrote to sixty-five school superintendents of cities of from 10,000 to 500,000 population and situated in all sections of the United States, asking them to kindly send me a list of what they considered the shortcomings of normal-school graduates.

I received thirty-five replies, representing twenty different states. Two had not enough experience with normal-school graduates to attempt an answer, one found them highly satisfactory after they had taught successfully for two years in some other city than his own, and the balance, or thirty-two, indicated from two to fifteen shortcomings. There were altogether twenty-seven points mentioned, which with the number of votes that each received are as follows:

1.	Lack of scholarship	21
2.	Too much emphasis on methods of presentation and too little on mastery of subject-matter	16
3.	Lack of ability to organize, manage, and govern	16
4.	Overconfidence—all-sufficiency	10
5.	Lack of training to present the subjects to be taught due to too short courses	10
6.	Inability to take the initiative	4
7.	Lack of personal culture	4

8.	Lack of a true teaching spirit	4
9.	Lack of training to teach special subjects	4
10.	Lack of qualification to do grammar-grade work well	3
11.	Lack of ability to discipline	3
12.	Lack of knowledge of phonics and the dictionary	2
13.	Poor in penmanship	2
14.	Poor in English	2
15.	Slow to favor new ideas	2
16.	Lack of knowledge of sociology	2
17.	Lack of an appreciation of psychology	2
18.	Not disposed to receive criticism in the right spirit	2
19.	Lack of accuracy and carefulness	1
20.	Theoretical and impractical ideas	1
21.	Lack of care in the orderly keeping of desks, etc.	1
22.	Not enough appreciation of the value of formal work	1
23.	Lack of professional ideals	1
24.	Not enough appreciation of school virtues	1
25.	Inclination to respect political conditions	1
26.	Lack of common-sense	1
27.	Do not know enough of the influence of instinct on the conduct of children	1

This sounds like a formidable list but it is really not as bad as it seems, as many of these points blend into each other and really constitute only a few shortcomings. In fact it would not be at all difficult to show how each of them is the result of one universal deficiency—lack of scholarship. To place the subject in a more convenient form for analysis and argument, I propose to treat it under ten heads and shall base my discussion upon the information that I have received from these thirty-two successful superintendents, combined with my own personal experience with the graduates of normal schools in three states.

I. LACK OF SCHOLARSHIP

This, then, is the most serious of all the young teacher's shortcomings—not to be able to concentrate his mind, to lack the power of thinking, to have no passion for knowledge, to be uninspired by literature and biography, not to be a student of humanity and a reader in his profession, not to realize the importance of knowing his subject from the ground up, lack of "those refined and gentle manners, which are the expression of fixed habits of thought and action."

To put it in a positive form, the schools need men and women who strive to measure up to ex-President Eliot's definition of the "cultivated man":

> Not a weak, critical, fastidious creature, vain of a little exclusive information, or of an uncommon knack in Latin verse or mathematical logic; he is to be a man of quick perceptions, broad sympathies, and wide affinities; responsive, but independent; self-reliant, but deferential; loving truth and candor, but also moderation and proportion; courageous, but gentle; not finished, but perfecting.

The scholarly teacher has a sense of what intellectual activity means and can better appreciate and respect the mental power and force of children.

He may violate every law of teaching agreed upon by all psychologists, yet he is so thoroly versed in his subject, so full of the spirit of investigation, and so sensitive to everything conducive to an inquiring and scholarly attitude, that he awakens and inspires like qualities in those with whom he comes in contact. Sheer force of knowledge and ability to know and keep in touch with the mental growth and activity of his pupils constitute the essential element of strength in a teacher. Children admire the teacher who knows his subject and has the power to attract them by the strength of his intellect and personality. He becomes a vital force in their lives.

During the acquisition of knowledge under such instructors in our normal schools, students, almost by their example, acquire scholarly qualities. The teacher reacts on them as an inspiration. Thru his personality and his grasp of the subjects that he teaches, they see the need of accuracy and carefulness in all that they do; they appreciate order and neatness in dress, in keeping notes, in caring for books and desks; they are impressed with the value of a true teaching spirit and exhibit it in a helpful and spiritual interest in those under them, and fine ethical and professional ideals toward other members of their faculty and of all other institutions of learning; they feel the great significance of correctness and precision in the use of English and of an understanding of the use of the dictionary in acquiring a vocabulary and a knowledge of the meaning and history of words; and best of all they see how a subject as it unfolds under a master-mind has its deepest significance in its power to develop thought and influence conduct.

The proper solution of this shortcoming of the normal graduate is the key to the solution of practically the entire criticism of the normal school.

II. TOO MUCH EMPHASIS ON METHOD OF PRESENTATION AND NOT ENOUGH ON SUBJECT-MATTER

I quote from various letters as follows:

"They drill better than they teach."

"Some of them are long on methodology and short on the application of the same."

"They are often full of devices which they have copied into notebooks and try to work off on their schools whether they fit or not."

"They are taught too much; drilled too much; read too many handbooks and do not read enough treatises."

"They lack the ability to motivate their work and take the initiative."

These sentences sufficiently define the second shortcoming of the normal graduate.

A knowledge of special methods of presenting a subject, skill in the use of devices, and an ability to meet situations with a mind well stored with preconceived plans and schemes, are a valuable equipment of a normal-school graduate. However, they should be subordinated to the end to be attained and not be the end in themselves, and are not acquired by special

drill upon them but should follow as a result, in the attaining of the mastery of a subject.

Slight mistakes of procedure weigh but little against the teacher if pupils and those who come in contact with him see that he has power of thought, know that he places content above form, and is determined to drill and memorize specific points and rules only after his children have been made to feel a need for them and see that they are paramount in the further comprehension of the subject and the advancement of his education.

III. LACK OF JUDICIOUS AND EFFICIENT CLASS MANAGEMENT AND ABILITY TO ORGANIZE AND GOVERN

Again I quote from superintendents' letters, as follows:

"Weak in ability to manage and govern a school."

"Inability to discipline a room because of too little practice teaching."

"Not as fine disciplinarians as from our high-school training class."

"Not enough standards of discipline and instruction based upon actual conditions in a classroom."

I gather that there is not a great deal of criticism of the normal-school graduates' ability to discipline as a distinct problem. The question of disciplining is included with that of organizing and managing a room, and failure seems to be due largely to insufficient practice and too small model schools. The great test of a teacher is the power to do, to bring things to pass.

Emerson in his essay on "The American Scholar" emphasizes three qualities which the scholar must have: he must know nature; he must be familiar with books; but above these valuable acquisitions, he must be able to live his thoughts, he must be a man of action. "Only so much do I know as I have lived."

Of course, this shortcoming cannot be entirely overcome, for no normal school can give enough extended experience to make a full-fledged teacher. Neither is it expected that they should. The most that they can do is to reduce this criticism to a minimum by allowing each student to have entire charge of all the work of an average-sized school for such a length of time as is necessary to test his ability to organize, manage, govern, and teach the children of that grade.

IV. OVERCONFIDENCE, ALL-SUFFICIENCY, SELF-SATISFACTION

Ten superintendents of our largest cities were quite emphatic upon this point—the overconfidence and all-sufficiency of the normal graduate.

This shortcoming has a few rather serious aspects. It leads many of the teachers to regard criticism as a reflection on the methods they have been taught; it makes them not always willing to readjust their ideas and methods to meet the new conditions of actual school work; it causes a disposition to insist on personal rights rather than to *earn* recognition of

their ability; it engenders a feeling that they do not need further preparation in the subjects they try to teach and an inclination to be too active on their own part rather than to develop the self-expression and activity of their pupils. But most serious of all, it creates a belief that they have completed their education and have now no further need of a systematic plan of self-improvement, or a necessity for continued intellectual growth.

It is said that, in any occupation, only one in twenty eminently succeeds and this is because when that one gets into the real work of life he does not cease to study and work. Certainly a leading characteristic of a teacher is his power of growth—growth in scholarship, growth in moral power, growth in the great art of living a beautiful and useful life. Overconfidence in one's own ability and an inflated idea of personal importance is usually the fault of a half-educated person. So again we come back to a lack of scholarship.

V. INSUFFICIENCY OF PREPARATION FOR GRAMMAR-SCHOOL, DEPARTMENTAL, AND JUNIOR HIGH-SCHOOL WORK

Among the many applicants for positions in the elementary schools which every superintendent receives each year, only a few desire or indeed will attempt to teach grammar-grade work. About the only remedy we have for this is to advance intermediate grade teachers into these seventh- and eighth-grade vacancies. Where salaries are the same in all the grades, many teachers seriously object to being placed in this more arduous and responsible work.

Then, too, in this country, the departmental plan of teaching is rapidly coming into practice in the grammar grades. The day is rapidly passing when an eighth-grade teacher will be expected to teach eight or ten subjects. Further than this, the ninth grade of the public schools in several cities is now organized with the seventh and eighth grades to constitute a junior high school.

VI. LACK OF ABILITY TO TEACH AND SUPERVISE SPECIAL SUBJECTS, INCLUDING MUSIC, DRAWING, MANUAL TRAINING, HOUSEHOLD ECONOMY, AGRICULTURE, PHYSICAL TRAINING, PENMANSHIP, AND PLAYGROUNDS

Altho most of these are new subjects, yet they are so practical and important that they are bound to become a fixed part of the public-school curriculum. Here is a field in which the normal-school graduates of the entire country are absolutely deficient, because our normal schools have not established courses of study of sufficient length and breadth to meet this new demand.

Rarely has any superintendent in the United States, no matter how extended his experience with normal graduates, ever gone to a normal school to get supervisors even in music and drawing, altho these subjects have been a part of the course of study for years.

The private institution has exhibited more foresight along all these lines than has the normal school. I believe preparation to teach and supervise these new subjects ought to be the peculiar province of the normal school, for teachers of special subjects ought of necessity to supervise their work in relation to the entire course of study. The teacher trained in the private school is likely to teach them as separate and unrelated subjects and thus, many times, bring them into disfavor with the regular teachers and the patrons of the schools, not because they lack educational value, but because they are not closely linked with the rest of the course in a way to vitally supplement and reinforce it.

VII. INABILITY TO BE OF SPECIAL ASSISTANCE TO BACKWARD AND ABNORMAL CHILDREN

Every large city, or groups of small cities, needs a competent specialist to help ferret out these children, diagnose their mental conditions, and advise as to the kind of activity which will best fit them to become self-directing and self-supporting members of society. In addition to this specialist, my city would need at least ten teachers trained and eager to do this kind of work.

This is another special field upon which the normal school must concentrate, in order to prepare teachers who have the patience, the sympathy, the expert knowledge of how to guide and direct this unfortunate mass of humanity that it may be raised to a higher moral and social plane and given the opportunity to develop to the maximum of its intellectual capacity. To prepare students for this work there should be a psychological clinic in at least one of the normal schools of each of the states of the Union.

VIII. LACK OF KNOWLEDGE AS TO WHAT CONSTITUTES STANDARD WORK IN THE LEADING SUBJECTS OF EACH GRADE

By this I mean normal graduates should know just about the grade of work to expect of children of average ability in arithmetic, language, etc., in that particular grade in which they have been prepared to teach, while in the normal school. Besides the model school there should be in each normal an experimental school to test out these matters and arrive at definite standards, such as Thorndike and Ayres have given us in penmanship, Thorndike and Bliss in language, Courtis in arithmetic, and Suzzallo in spelling.

IX. LACK OF DISCERNMENT AS TO ALL KINDS OF WASTE

This involves waste due to using the time of the pupils in getting material ready for the various recitations of each day, as pens, pencils, chalk, erasers, board work, etc., waste of the time of the majority of a class that understands a problem or the subject under consideration, while the teacher is trying to get the few who do not comprehend it to master it;

waste in not holding the class to the subject in hand at the time of the recitation; waste in the loose assignment of supplementary material that pupils are expected to get from reference books; waste in overdrill upon things that pupils know; and waste in nagging at children and not cultivating the habit of praising good work and conduct and in causing each child to strive to be his own competitor and work to the limit of his ability.

This matter of waste in the organization of the schoolroom and in conducting the recitation is vital in the progress of the child thru the grades. It deserves particular emphasis in the training of every student in our normal schools.

X. LACK OF KNOWLEDGE AND INTEREST IN HUMAN LIFE

The normal student must be enthused with the idea that the greatest compensation in teaching is in serving others. This will involve, on the part of the teacher, a knowledge of sociology and a deep interest in the civic organizations of the community where he teaches; he must believe in the salvation of the human family; he must love truth and righteousness; he must realize the importance of knowledge to better civilization; and he must be an inspirer of right conduct—a real power in the career of each individual child.

In other words, he must be a student of humanity and especially of the child—his physical and mental periods of growth, his characteristics, his capacities and inclinations, his home and community life. He must know and give the instruction best adapted to meet the child's present and future needs and strive each day to develop him to the highest mental possibilities of which he is capable. The normal schools cannot give their students too broad a training for personal sacrifice and helpful service to mankind.

Thus I contend that there are shortcomings more or less characteristic of all normal-school graduates. But, in the last analysis, are not these same shortcomings common to all of us, regardless of our training and even after years of experience? Life is a growth, a development, an overcoming of difficulties. The best that the normal school can do is to put the student in touch with the varied phases of this complex life as it applies to his work and give him the equipment for the making of a masterful teacher. Normal schools cannot turn out trained teachers.

Splendid as has been their service to the cause of education in the past, they have a great mission to perform for education in the future. Founded and developed as they have been when the elementary course of study was simple and the demand for trained teachers and expert supervision not pressing, they are today brought face to face with an elementary course of study, enriched and broadened; a need for trained specialists, principals, supervisors, leaders, and scholarly teachers; a cry for help in the elimination of irrelevant material and the standardizing of the work in the fundamental subjects of the course; the need of assistance in solving the

problems of backward and abnormal children, and in effectively conserving our human resources.

How well the public schools meet these problems depends in a large measure upon the efficiency and high ideals of our schools for the training of teachers—the state normal schools.

DISCUSSION

C. W. Stone, head of Department of Education and director of Training School, State Normal School, Farmville, Va.—In opening the discussion I shall offer three points for your consideration:

1. The merits of Superintendent Adee's data.
2. An interpretation of Superintendent Adee's conclusions.
3. Suggestions for minimizing the shortcomings of normal-school graduates.

First: as to the merits of Superintendent Adee's data.—It seems to me that he has done well to gather data from his fellow-superintendents, and to base his paper on definitely stated conclusions. Other things being equal, the larger the number of individual judgments, the more reliable the data; and while the questionnaire method can never be scientifically accurate, it is probably our most practicable means of learning the general drift of opinion or judgment concerning a given question.

Still, I find myself in trouble when I come to study the tabulated judgments of these superintendents. The following questions are raised: (1) With what standard were these superintendents measuring normal-school graduates? (2) What is the standard by which they are short? (3) They have shortcomings—What is it that they are short in coming to?

In as complex a matter as teaching ability, an exact standard is impossible, but two fairly distinct attitudes are entirely possible, viz., the attitude of judging shortcomings according to the average teacher, and that of judging according to the ideal teacher.

As far as I can determine from Superintendent Adee's paper, we do not know which of these attitudes the superintendent took in aiming at the conclusion as to the tabulated shortcomings; and because I believe that Superintendent Adee's method is of great value in securing the basis for far-reaching benefits to normal-school work, I raise the question of the importance of securing data on an established and uniform basis.

Another way to state my contention is that we need to know how *long* our graduates are before we can tell how *short* they are. If Mr. Adee's shortcomings are a statement of the inability of normal-school graduates in relation to the average teacher, they are mighty serious—they are mighty *short* comings. But if they are in relation to the ideal teacher (even tho this entity does vary widely), the shortcomings are not very serious after all. For on this basis, even tho they have come *short* of the ideal, they are probably *long* on the basis of the average teacher.

Personally, I am inclined to think that, in the absence of guides for other procedure, most of the superintendents graded on the basis of the ideal, and this, I think, is an added reason for not regarding the tabulated list as being as ominous as it sounds.

I believe that even more helpful data on this subject could be gathered by asking superintendents to grade all their teachers in each of the important teaching traits, and then we could determine the shortcomings of normal-school graduates by the relative position in the scale of excellence. An accurate study would involve several precautions, such as discriminating as to years of experience of normal-school graduates, showing deficiencies, etc. For instance, as Superintendent Adee suggests, it may very well be that most well-trained normal-school graduates are unable to discipline upper intermediate and grammar grades well during their first few years of teaching, because they are too young in years. But I contend that to continue to place graduates in these grades

during their first years of teaching and let them fail would be a shortcoming not of normal-school graduates, but of superintendents.

Second: an interpretation of Superintendent Adee's conclusions.—I find myself in agreement with Mr. Adee in his main contentions. I concur heartily in his recommendations:

(1) That method be regarded as means rather than ends; (2) that normal schools should extend their courses so as to provide training for departmental and junior high-school teaching; (3) that training-school work should include experience in organizing and managing a typical schoolroom; (4) that the normal schools give special attention to engendering the ideal of service.

My main questions as to Superintendent Adee's conclusions concern his position regarding:

1. Inability to assist backward children.
2. Lack of knowledge as to standards of teaching.
3. Inability to teach the newer subjects.
4. Overconfidence.
5. Lack of scholarship.

Taking up these points in the order in which I have arranged them:

1. *I doubt the wisdom of normal schools undertaking to train teachers to be of special assistance to backward children.* I believe that this represents a very highly specialized field, and that the university school of education is the place for giving this training. Comparatively few teachers with this specialized training are needed. All teachers should have detailed training in teaching according to the facts of individual differences, and this work is *crucial* in every teacher training course; but I believe that the exceptional children should be organized into separate classes for which a comparatively few teachers will be needed. And these can best be trained in the educational departments of universities.

2. As to the second point that I question, viz., *that normal-school graduates have shortcomings as to "what constitutes standard work in the leading subjects of each grade."* I am heartily in sympathy with the recommendation that normal schools ought to contribute to the solution of this problem, but I cannot see that the fact that normal-school graduates are not proficient in standards is a just criticism. From now on, I believe this criterion can be rightly applied, but Superintendent Adee's conclusions are based on the work of students that have graduated. Standardization is young. Courtis's tests were available only last year. Thorndike's handwriting scale only the year before, and then not in usable form. Ayres, Bliss, and Suzzallo have published during the current year. In such vital matters we must be exacting of normal schools, but let us not be retroactive.

3. I agree with Superintendent Adee *that normal-school graduates are at present deficient in ability to teach the newer subjects.* This is the fault of newness, however, and not of the normal schools. As soon as superintendents are able to send high-school graduates with as good preparation in drawing, sewing, cooking, etc., as they now have in arithmetic, spelling, etc., the normal-school graduates will cease to be short in these respects. And as to the recommendation *that normal schools specialize in training for the teaching of these subjects,* I am not agreed for just the reason that Superintendent Adee cites as an explanation of the failure of private schools to give satisfactory teacher training in these subjects, viz., the reason of isolation. Just so long as the newer subjects are regarded as something apart, just so long will they remain isolated, and, therefore, new. Hence all normal schools ought to give adequate training for the teaching of all common-school branches, including drawing, industrial work, etc., but some one normal school ought to specialize in training supervisors of these branches because only a few supervisors are needed, and for more than one school in a state to offer courses for supervisors would be wasteful.

4. *As to overconfidence*, I acknowledge the danger, but I want to remind Superintendent Adee and ourselves that the situation with which a normal-school graduate is confronted requires a considerable degree of confidence. Convincingly to face strange pupils, fellow-teachers, principal, and superintendent demands a considerable amount of stability; and that some are inclined to overdo the matter is not surprising. Then, too, the danger is not altogether one-sided. I believe that it is entirely possible for principals and even superintendents to be overconfident in their dealing with normal-school graduates. Normal-school graduates are not always wise in their use of pedagogical knowledge, but the chances are good that if they come from a good school they have much of value to offer those with whom they are to work, and overconfidence on the part of either the normal-school graduate or her superior officers is fatal to the best realization of the normal-school preparation. Many a normal-school graduate with the initiative which, if well directed, would make her a constructive force in a corps of teachers is so thoroly discouraged by overconfidence of her superior officials that her constructive strength is largely lost.

5. Superintendent Adee rightly makes lack of scholarship the crux of all the lacks, and in the main I agree with his treatment of the matter, as far as he goes; but I do not think he goes far enough. According to the gist of Superintendent Adee's discussion scholarship is confined to subject-matter. Adequate knowledge of subject-matter is essential, but it is only one of the fivefold phases of the knowledge necessary to adequate preparation for teaching. The others are (1) knowledge of the aims of education; (2) knowledge of the nature of learners; (3) knowledge of experience of learners; and (4) knowledge of methods.

A well-prepared teacher must be scholarly in each of these phases of knowledge. To do this the field of scholarly work must be enlarged from the conventional book and laboratory study to include what Superintendent Adee so well states under his tenth point—*knowledge of and interest in human life.*

The normal-school graduates must be trained to recognize child-study as worthy of as scholarly work as Latin, history, or book psychology, and to use the playground and community life as just as truly laboratories as those provided for physics or chemistry.

Again it seems to me that Mr. Adee's statement under scholarship is open to objection when he says "and best of all they [the pupils] see how a subject as it unfolds under a master-mind has its deepest significance in its power to develop thought and influence conduct."

Many a research scholar can *unfold a subject* with wonderful success, but it is notorious that our worst teaching is in the graduate departments of our universities. I believe that the above quotation in its setting puts the emphasis at the wrong point, viz., on knowledge of the subject-matter and ability to unfold it rather than on knowledge of the child and ability to unfold him. It is "best of all for subject-matter to influence conduct," but in order to do it that subject-matter must be chosen and used as a means and not as an end. The teacher must have her mind firmly fixed on the development of the learners and not on the unfolding of the subject.

Hence scholarship as Superintendent Adee pleads for it, indispensable as it is, is not adequate for the teacher. By itself this statement is even dangerous, in that it places the emphasis at the wrong point—on *matter* rather than *mind.*

Third: the treatment of my third point will serve as a summary. In this I shall lay down certain theses for your discussion, stating means for minimizing the shortcomings of normal-school graduates:

1. That a knowledge of elementary economics and educational sociology must be regarded as just as essential to normal-school graduates as educational psychology.

2. That at least three years of professional work in addition to a high-school preparation are needed to prepare adequately for teaching in upper grammar and junior high-school work; and that this work should be broken into two units—a unit of two years,

the completion of which prepares for teaching in intermediate grades, and another unit of one year, the completion of which prepares for teaching in departmental work of grammar or junior high schools, this last year to be taken only by mature students with experience.

3. That practice schools should be large enough and so administered as to provide experience in classroom teaching and management under typical conditions.

4. That individual normal schools be delegated to give work in preparing supervisors for the newer subjects, but that all normal schools give work to prepare for teaching all the common-school subjects.

5. That the high-school preparation for normal-school work should be vocational rather than general; and that whenever possible superintendents should see to it that these high-school pupils have professionally trained teachers, so as to afford the best possible start toward a true professional attitude.

6. That normal schools give special attention to utilizing standards for measuring the results of teaching.

7. That special precautions are needed to counteract the wasteful tendency toward a hiatus between theory and practice. Isolation of theory and practice are not only wasteful of energy but cause a teacher to need to fall back on external discipline and fail in the best kind of discipline—what Superintendent Adee calls organization.

8. That scholarship is just as important in normal-school work as in any other work, and that normal-school scholarship should include attainments in child nature and child environment as well as in subject-matter.

John W. Cook, president, State Normal School, DeKalb, Ill.—Obedient to the request of the president I undertake a brief discussion of Mr. Adee's paper. His request came at so late an hour that I have not been able to test out the criticisms of the several superintendents by communication with some of them. It seems to me very desirable to know from what standpoint they estimate the value of normal-school graduates. Do they expect them, in the nature of things, to be greatly superior to teachers secured by the ordinary method? Are they criticized from an ideal point of view, that is from an assumed conception of what they should be without regard to any comparisons with other teachers, or do these criticisms indicate their shortcoming as compared with teachers who do not have professional training?

In entering upon the discussion, it should be said that there is no such a thing as a normal school any more than there is such a thing as a Baptist church. As there are Baptist churches so there are normal schools. The normal schools are so new that they are a group of quite individualized institutions rather than a group of conventionalized institutions. Perhaps in no respect do they differ from each other more than in the attention given to practice teaching. While it is clear that there might be a surplusage of practice teaching to the sacrifice of scholarship, that danger has hardly been realized in existing normal schools.

Of the thirty-four replies representing some seventeen states, twenty-one, the largest number in agreement, declare lack of scholarship to be the main criticism. This appears to me to be quite as much a reflection upon the public high schools as upon the normal schools. The great majority of normal-school graduates, I assume, have completed a four-year course in an accredited high school before entering the normal school. This would mean that they are prepared for the university or college. It is fair, further, to assume that at least half of the two years spent in the normal school is devoted to the betterment of scholarship in the subjects to be taught. This is certainly a very moderate estimate. The charge then is that teachers who have spent five years and more above the elementary grade still lack the scholarship requisite for teaching in elementary grades. It is evident that the criticisms here made come from those who hold that university graduation is a prerequisite for teaching in elementary grades. I am willing to concede

the lack of scholarship in anyone who has done no more than five years beyond the elementary school, but such a criticism is made from the standpoint of a highly superior education rather than from an estimate of something quite above the average scholarship of teachers. Let us as normal-school men make note of the criticism and let us endeavor, as soon as possible, to extend the course of study in the training school to three years and where possible to four years.

The second criticism is that too much emphasis is placed upon methods of presentation and too little on mastery of subject-matter. This is a very interesting criticism since it would require the normal schools to return to the old academic curriculum to the neglect of professional work. Until recently the main criticism against the normal schools was that they were not professional but were mere academies for the continuation of work in the ordinary curriculum. The normal-school men have zealously endeavored to meet that criticism by making the normal schools as professional as possible with the material at hand in our student body. Now the view of the critic is exactly reversed and we are criticized for doing the very thing that superintendents demanded. It would seem as if we were placed in a position midway between his satanic majesty and the deep sea. Whichever way we turn we are in imminent peril of our lives.

If the word "method" be rightly understood there can be no danger that the normal schools will go to extremes in its development. What the teachers need above everything else is method in the true sense of that term. It implies scholarship and judgment and mental grasp and tact; in brief, it implies professional efficiency. "Method" is a comprehensive term and covers the whole field of professional skill and professional competency and professional mastery. The great lawyer is a man who is master of method in the practice of the law. The great farmer is one who has acquired the "method" of agriculture. The poor, pinched, narrow conception that thinks of method as a set of "tricks of the trade" is the gravest of misinterpretations of a superior term. If we have made ourselves liable to sharp criticism by method work we have made the gravest of mistakes and must rise to a new realization of what is implied in the professional preparation of teachers.

Sixteen of the superintendents criticize normal-school graduates on the score that they lack the ability to organize, manage, and govern. This is a criticism that will hold against all beginners at teaching, but the normal schools should be able to disarm fair critics on this score. Our normal-school students must find opportunity to show their ability to manage and govern children; our practice teaching must be so extended as to try them out, and graduation should be denied to those who show such ingrained incapacity, especially in management and government, as to render their success very doubtful.

With regard to the organization of subject-matter, there should be slight ground for criticism. I do not mean by this that our students should be masters of the art but that they should be so well started in such ability as to satisfy their supervisors and by their growth in power should also win warm commendation.

A fourth criticism declares that normal-school graduates are guilty of overconfidence and that they have a sense of all-sufficiency. Ten superintendents join in this criticism. The number is large enough to suggest ground for the charge. I have no disposition to discuss this objection. If we find it among our graduates we should take immediate steps to cure them of so disagreeable and absurd a fault.

The fifth criticism declares that they lack the ability to present subjects and that this is mainly due to the limited courses which they pursue. If there is ground for such criticism, and I assume that there is, we can recognize it and remove it. It cannot be done, however, by lessening the amount of practice teaching in order to enrich the scholarship. It must itself be an enrichment in scholarship as well as a development in skill. We shall grow along this line as we have along all lines, I think, and our graduates will progressively manifest greater power in this critical relation of the teacher to the pupil. It is a vital criticism and if our pupils cannot present subjects well they cannot do anything well.

The act of teaching is the act in which the teacher realizes his supreme function. Are we in danger of overlaying this idea with matters of minor importance? If we are we may well look to our schools and profit by the suggestion of superintendents.

Of the remaining criticisms most are offered by very few: nine of them by one in each case; seven of them by two, two of them by three, and four of them by four.

Mr. Adee expresses a judgment which I had expected when he says that he much prefers normal-school graduates to other teachers. The very fact that they are endeavoring to fit themselves for their work has aroused in superintendents high expectations of efficiency. Too much must not be expected, however. Let us remember that compensation is still limited in most cases; that the teaching art is tremendously difficult to acquire in any superior way; that encouragement and appreciation and patience are qualities which superintendents must exercise; and that the success which is conceded to our graduates is a matter of no small satisfaction to us.

DIFFERENTIATION OF COURSES IN NORMAL SCHOOLS

GUY E. MAXWELL, PRESIDENT, STATE NORMAL SCHOOL, WINONA, MINN.

The study of the history of the normal-school curriculum during the past thirty-five years reveals a remarkable advance in standards of work and prepares one to believe that the near future will see definite advances beyond the present stage of development. There is probably no field where the service of scholarship is more needed today than in the field of public elementary education, rural and graded; none where the problems will continue to grow more as years go by; none whose solution will more fully minister to the welfare of the state. Normal schools should regard these problems of elementary education as distinctly and quite exclusively their own, and attack them with the enthusiasm and energy inspired by a great mission.

The extent and therefore the content of the normal-school course of study, however, are limited to a field unjustifiably small, in spite of what was said about the need for expansion. Economic pressure for funds and the low estimate still placed upon the value of the public school as an indispensable social factor are largely responsible.

Since there is no immediate prospect of securing the four-year or even a three-year course of study necessary for adequate preparation for grade teaching, differentiated work to give more immediate results is clearly the best temporary expedient to employ while awaiting the fulfilment of the demand for adequate and complete preparation.

The normal-school course of study, then, should contain a common group or core of subjects to serve as the foundation of the teacher's professional preparation. This core should be supplemented by differentials, certainly one for lower grades and one for upper grades; possibly one also for middle grades, and in states where normal-school graduates go into high schools, a high-school differential should also be added. The content of the core, the relative amount of work therein compared with the differential,

the freedom of choice or number and kinds of electives within the differential, these all are important problems for consideration and solution.

As was noted, there are not many normal schools which announce in their catalogs any formal differentials in courses for the benefit of teachers of different grades of the elementary school. Three courses, however, from as many schools, have been chosen for presentation here as illustrative of what is now being done in this direction. Attention is first invited to a course chosen from a Pacific coast school, Bellingham, Wash. Since this school employs the semester term, the weights of subjects are here changed into equivalents for terms of three months, a unit representing twelve weeks of study, five hours per week.

BELLINGHAM, WASH.

CORE		HIGHER-GRADE DIFFERENTIAL	
Arithmetic	0.75	Arithmetic	0.75
Drawing	0.6	Geography and Methods	0.9
English	0.9	Grammar and Literature	1.5
History of Education	1.2	Elective	5.1
History and Methods	0.9		8.25
Humane Education	0.3		
Music	0.6	LOWER-GRADE DIFFERENTIAL	
Philosophy of Education	1.2	English Composition	0.75
Physical Education	0.9	Literature and Stories	0.75
Psychology	1.8	Manual Training	0.6
Reading	0.6	Music	0.15
Sex and Moral Education	0.3	Nature-Study	0.6
Social and Political Economy	1.2	Primary Methods	1.5
Teaching and Observation	4.5	Elective	3.9
	15.75		8.25

Here we have a large core and a small differential, $15\frac{3}{4}$ for the former with $8\frac{1}{4}$ for the latter, the total term units being 24, which is the most common total among normal schools thruout the country. There are 14 subjects named in the core, one of them, teaching, covering $4\frac{1}{2}$ terms, or more than $\frac{1}{4}$ of the whole. The average for each subject in the core is a little over one term. The assigned differential for grammar-grade teachers is 3 subjects out of 8, the remaining 5 being free electives. For primary teachers, the assigned differential is 4 and the free elective, 4. The $4\frac{1}{2}$ terms of practice, however, may be permitted or required in one department of the model school and thus really increase the differential to 12 units plus, or over half the entire course. One gets the impression here that the core subjects are of too great variety to require or permit scholarly grasp or sequence of effort. No less than 9 of them represent less than 60 hours each. However, the printed course of study is a poor criterion of school standards and does not justify adverse criticism here.

Turning next to Cedar Falls, Iowa, we find a smaller core with larger differentials for grammar-grade teachers and for primary-grade teachers.

The core includes 10 units out of 24. This core will be reduced by two units if practice teaching is counted as a differential subject which it properly is. The grammar-grade differential is almost wholly unassigned work and permits 11 free choices among electives. The primary differential is very definite as to requirements and makes definite and extensive provision for the primary teacher's duties, permitting only one elective out of 14 term units of special subjects. Here again, the printed outline raises questions which acquaintance with actual conditions would doubtless answer, e.g., why not make more definite assignment in the grammar-grade differential instead of making it practically all elective?

CEDAR FALLS, IOWA

CORE

Drawing	2	Psychology	2
History of Education	1	Rhetoric	1
Music	1	School Management	1
Teaching	2		10

HIGHER-GRADE DIFFERENTIAL		LOWER-GRADE DIFFERENTIAL	
3 Reviews out of	3	Botany and Zoölogy	2
Arithmetic		Drawing	1
Grammar		Elocution	1
Geography		English Literature	1
Penmanship		Kindergarten Theory and Observation	1
Physiology		Primary Handwork	1
U.S. History		Primary Methods	3
5 College Electives	5	Teaching and Observation	2
6 Free Electives	6	Music	1
	14	Elective	1
			14

Referring now to the Ypsilanti course, we find a still smaller core, totaling, with practice teaching omitted, $\frac{1}{4}$ of the two years of work. Here we again find opportunity for very extensive, even excessive free choice for grammar-grade teachers, but with detailed and definitely assigned subject material for primary teachers.

It is interesting to note that these three courses, in actual use in the schools named, have little in common. They vary in amount from 8 units in the core to 16 units. The cores have not one commonly weighted subject. The nearest approaches to unanimity in the minds of the makers are found in the requirements in the history of education and in psychology. Each of these subjects varies from a common amount by only 0.2 of a term. Nevertheless, each course possesses values and has the merit, in the judgment of each faculty, of satisfactorily meeting the needs of the students enrolled in the institution.

There follows next a suggested course, designed to avoid all errors which may appear in the courses in actual use. It offers a core and two

Ypsilanti, Mich.

CORE

Drawing	2	Teaching	2
History of Education	1	(Physical Education four, no credit)	
Pedagogy	1		8
Psychology	2		

HIGHER-GRADE DIFFERENTIAL

Choice of 6 out of	
Arithmetic, Civics, Drawing, Geography, Hygiene, Music, Physical Education, Nature-Study, Reading	6
Electives	
Major any 4 from one department	4
Minor 3 from each of 2 departments or 2 from each of 3 departments	6
	16

LOWER-GRADE DIFFERENTIAL

American Poets	1
Arithmetic	1
Blackboard Sketch	1
English Composition	1
Mythology	1
Kindergarten-Primary Instruction	1
Music	1
Primary Literature	1
Primary Nature-Study	1
Supplemental Handwork	1
Any 4 from Geography, Grammar, History, Physical Education, Hygiene, and Reading	4
Free Electives	2
	16

A Suggested Course

CORE

History, Civics, and Social Science	3	Teachers' English (Composition, Reading, Literature)	3
Principles and History of Education	2	Teachers' Music and Drawing	2
Psychology	2		14
Teachers' Arithmetic and Geography	2		

DIFFERENTIAL

A. Alternatives (1 from each group)

1	Primary-Grade Curriculum I or Teachers' Grammar	1	
2	Primary-Grade Curriculum II or Grammar-Grade Curriculum	1	
3	Primary-Grade Teaching and Management	3	
	Intermediate Grade Teaching and Management	3	
	or Grammar	3	3
4	Elective Handwork, Woodwork, Cooking, or Sewing		1
			6

B. Electives (4 to be taken)

Advanced English, Advanced Geography, Elementary Agriculture, History of Education II, Public Speaking, Physical Education, Kindergarten Education, etc., and special course subjects when progressive sequences of previous work 4

Note: Advanced Geography required of all grammar-grade teachers.

differentials for upper- and lower-grade teachers. The two differentials are included in a group of alternatives, and in a group of electives. The core includes 14 units or 7/12 of the course. The alternatives provide 6 terms of special preparation for upper grades and 6 for lower grades, while the electives permit 4 terms of further specialization, or offer this considerable amount of opportunity for related advanced study in subjects which appear in the core or in the alternative portion of the differential.

In the list of constants, psychology is given two terms as a basic study for teachers, since teachers deal primarily with mind and should, therefore, know its nature. The principles and history of education in its larger aspects are given two terms. The common branches, except grammar, as the basic subject-matter in elementary schools, are assigned four terms of time and study, while drawing and music, universally recognized as indispensable art-expression subjects, receive a term each. Literature and social science for their culture values, with civics as a basis for the knowledge of our forms of self-government, are assigned one term each, making a total of 14 units or somewhat more than half the two years' work for each prospective teacher of whatever grade.

There then follow the differentials included in two large classes of subjects, in one of which, called here the alternatives, the student is limited in his choice to two lines of effort, in accordance with his preference for work in upper grades or for work in lower grades. Two terms in primary-grade curriculum are required of primary teachers. Each term deals with the specific subject material of the lower grades and is intended to include, for the first term, a careful and intensive consideration of such topics as beginning reading, nature-study, and number, with constant reference to methods of presentation; also, program-making, seat-work, room management, state course of study, etc.; language, geography, spelling, and phonics, with methods, discipline, special days, festivals, games, etc., are included in the second term. Higher-grade teachers choose teachers' grammar and the subject entitled "grammar-grade curriculum" which deals with the elementary-school course in a similar way, but with special emphasis upon grammar-grade problems, including also examinations, debating, discipline, methods, etc. There are also specialized choices in an industrial group and in practice teaching.

The second large class, the electives, offers a fair degree of choice with four terms for primary teachers and three for grammar-grade teachers, the latter being required to pursue a second and more advanced term of geography for the sake of its science values as well as its practical values for higher grades. Choices in these four electives may fall among a large list of professional, academic, and special subjects.

The suggested course is presented in the belief that the 14 constants include well-established, scholarly, and indispensable subjects in about the right ratio to the 6 terms of special work and the 4 terms of electives, and

that the mastery of this course by a student possessed of good health, good disposition, and good character will, within the possibilities of two years' study, insure the state a first-class teacher, at once practical and scholarly, ready for service on the first day of school.

The justification for the adoption of differentiated courses of study, as here illustrated and recommended, lies in the fact that by their aid the great majority of normal-school graduates will be sent into the schoolroom much more immediately effective, with much more definite plans and habits of procedure, and with ability to get much more satisfactory results. It is certain that such immediate success is to be preferred to the broader and deeper academic scholarship of the traditional kind, which is valuable to the student as an individual and ultimately valuable to him as a teacher, after several years have taught him how to teach, but which must be sacrificed in some degree to the interests of boys and girls who have a right to skilful instruction on the part of their teachers as well as a right to the inspiration of scholarship. The plan is not intended to take the place of more extended courses for teachers, but to meet a practical situation while we await the day when three- and four-year courses in normal schools shall furnish the complete professional preparation which should be the possession of every true teacher and the birthright of every pupil.

DISCUSSION

John L. Alger, principal, State Normal School, Providence, R.I.—While the need for better preparation for work in particular grades is apparent, it does not seem to me that the plans outlined are the ones best adapted for bringing about the desired results.

The year of advanced work that has been suggested is too liable to attract the ineffective rather than the strong students for whom it is planned. One who does not at first succeed easily and happily in teaching is ready to take such an advanced course, but such a teacher is not likely even after longer years of preparation to be well equipped for the most important positions. If in some way we could really succeed in sorting out and bringing together for such a course the most promising of our young teachers, the plan would be more likely to be profitable. On the other hand, we may at once offer longer and richer courses, with opportunity for elective and advanced work, during the regular normal-school period. Especially now that our high schools are sending out their graduates a little younger each year, it will be found that many students entering normal schools, and many parents of such students, will be willing to plan from the very beginning for the richest and fullest preparation it is possible to receive.

As to the plan that has been presented for differentiating the normal course for primary- and grammar-school work, it is often found that students are wrong in choosing the grade in which they wish to teach. The grade may be selected because of a liking for certain critic teachers or on account of the larger salary in the higher grades, or because of a special fondness for the younger children, instead of because of aptitude. In many cases the normal teachers are unable to give valuable assistance in this matter of choice until the students have really commenced practice teaching, rather late in the normal course.

Our own experience has led us to postpone attempts to differentiate courses until as late as possible. Then the effort is made to give such a thoro preparation within the narrow range of grades selected that immediate and self-encouraging success is assured

from the very first. Fortunately we do not have to feel that everything concerning all grades must be taught in the normal school. With the proper background of observation and general training, with the opportunities that should be offered by every normal school for assistance after graduation, including the important item of personal interest, and with the right spirit toward school work, the teacher should be able to change from one grade to another without serious loss.

PRELIMINARY REPORT OF COMMITTEE ON NORMAL-SCHOOL STANDARDS

W. T. CARRINGTON, PRESIDENT, STATE NORMAL SCHOOL, SPRINGFIELD, MO., CHAIRMAN

The committee of seven appointed by this department to investigate and report on standards in normal schools has not had a meeting. The membership of the committee is representative of all sections of the United States and widely separated. It has no funds at its command to pay the expenses of a meeting.

The chairman of the committee prepared a questionnaire and with the help of the other members of the committee reports have been gathered from a large number of normal schools, practically all except in the South and the far West. Our inquiries related to entrance requirements, to the amount of academic studies required, and to the character and extent of pedagogical training. Our inquiries also sought to find what differentiation is made in preparing teachers for rural and city schools, for high schools, and for supervisors in special lines, and how these differentiations are made.

The result of these inquiries would indicate that there is great lack of uniformity in the state normal schools of the country touching all these points. Most state normal schools admit pupils upon the requirements for the lowest grade of certificate issued in their respective states. The academic studies in the normal school are limited to the thoro study of the subjects taught in the public schools and to the usual requirements in high schools. In some states, however, there is a strong tendency to add subjects of college rank of academic value. In this connection the expression "of academic value" is applied to subjects taught for the sake of culture, power, and knowledge desirable, if not necessary, to make good citizens, to perform efficient social service, to develop character without reference to any specific use to be made of such in teaching.

The pedagogical training required in state normal schools, as a rule, covers two years, including such subjects as psychology, school management and school methods, observation and practice, and a thoro study of all subjects to be taught in public schools with the view of teaching them.

State normal schools have little differentiation in courses of study designed for the preparation of teachers in rural and city schools, for departmental teaching, or for supervising special subjects. There seems to be a tendency in this direction, however.

In many states four-year courses with full four-year high-school entrance requirements have been developed in institutions usually called teachers' colleges. In some of the states these teachers' colleges have been established in connection with the state universities. In other states they are established in addition to schools of education in the state university.

There is a strong tendency to make normal-school courses include three years of college rank work, about one year of which is to be of academic value. As stated before, the committee has had no opportunity to discuss these questions and formulate a report. From interviews with two members of the committee and correspondence with others it appears that the committee will not be willing to report a course of study of two years as a proper standard for state normal schools. It is recognized that many will teach in our public schools, both rural and urban, who have not had even that much education. It is thought, however, that the time has come when standards should be set higher, and that the state should not put its seal of approval on one as a well-prepared teacher who has had such limited education and training as afforded by a two-year course; I for one shall favor fixing the standard at four years—about half academic and half professional.

The committee asks for further time, and hopes to be able to make a more definite report at the Salt Lake meeting next July.

A majority of the committee have approved the following statements concerning the place and function of normal schools in a school system.

1. It is the duty of state-supported normal schools to give instruction, carefully planned, that will best prepare teachers for serving the community wherein they are to work.

2. Whether or not it is a universally recognized function of state normal schools to prepare teachers for high schools, it is a fact that graduates of normal schools are doing a very large share of the work in public high schools.

3. A normal school should not limit its work to the preparation of teachers to meet present conditions. It should study problems of education in general, and of its own field in particular, and create a demand for trained teachers who can build wisely for the future, and lead in any and all educational progress.

4. There is no ideally prepared teacher considered apart from the specific work he is to do. A large degree of culture and refinement, power of self-adaptation, and the ability to take the initiative are perhaps more desirable than the ability to follow directions of supervisors and to carry out specific courses of study.

5. Teacher training cannot be best done when it is superimposed on an academic course given in an atmosphere saturated with sympathies and ambitions in other directions. Our teaching corps will gain in efficiency to serve the dominant interests of any given community, and in adaptability if we would get away from the oft-repeated statement that the liberal

should precede the professional. An organic conception of education demands the blending of the two purposes, the intermixing of studies designed for power and studies designed for technical efficiency. He who pursues the academic and professional at the same time sees the relations of the two and the importance of each.

SECRETARY'S MINUTES

SALT LAKE CITY MEETING

OFFICERS

President—JOHN A. H. KEITH, president, State Normal School.....Oshkosh, Wis.
Vice-President—WILLIAM E. WILSON, principal, State Normal School.....Ellensburg, Wash.
Secretary—HENRY C. WILLIAMS, dean, State Normal College, Ohio University...Athens, Ohio

FIRST SESSION—WEDNESDAY FORENOON, JULY 9, 1913

The Department of Normal Schools met in joint session with the Department of Elementary Education in the Tabernacle and the following program was presented:

Topic: "The Training of Teachers":

a) "In Normal Schools and Colleges of Education"—Z. X. Snyder, president, State Teachers College, Greeley, Colo.; John R. Kirk, president, State Normal School, Kirksville, Mo.

b) "In Service—Adjusting the Normal-School Graduate to the City System"—Frances Jenkins, supervisor of elementary grades, public schools, Decatur, Ill. (For this paper see Department of Elementary Education.)

SECOND SESSION—THURSDAY FORENOON, JULY 10, 1913

The Department of Normal Schools met in joint session with the Department of Rural and Agricultural Education. President John A. H. Keith being absent, Vice-President William E. Wilson took the chair.

D. W. Hayes, president, State Normal School, Peru, Nebr., presented a paper on the subject "What the Normal Schools Can Do and Ought to Do with the Training of Teachers for Rural Communities."

Discussion: John R. Kirk, president, State Normal School, Kirksville, Mo., and J. G. Crabbe, president, State Normal School, Richmond, Ky.

THIRD SESSION—THURSDAY AFTERNOON, JULY 10, 1913

The Department of Normal Schools was called to order at 2:30 P.M.

Willis H. Kerr, librarian, State Normal School, Emporia, Kans., being absent, his paper on "The Library Work That the Normal School Ought to Do and the Influence Which It Ought to Have in Stimulating Library Work" was read by J. H. Hill, president, State Normal School, Emporia, Kans.

Discussion: Jesse F. Millspaugh, president, State Normal School, Los Angeles, Cal., William J. Hawkins, president, State Normal School, Warrensburg, Mo., W. T. Carrington, president, State Normal School, Springfield, Mo., and several librarians.

Following this discussion, President W. T. Carrington, of Springfield, Mo., made a tentative report for the Committee on the Standards That Are Agreed upon in the Proper Making of a Teacher, and asked for further time, which was granted.

The following officers were elected for the coming year:

For *President*—J. G. Crabbe, president, State Normal School, Richmond, Ky.
For *Vice-President*—U. S. Conn, president, State Normal School, Wayne, Nebr.
For *Secretary*—W. T. Carrington, president, State Normal School, Springfield, Mo.

The meeting then adjourned.

W. T. CARRINGTON, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

THE TRAINING OF TEACHERS IN NORMAL SCHOOLS AND COLLEGES OF EDUCATION

Z. X. SNYDER, PRESIDENT, STATE TEACHERS COLLEGE, GREELEY, COLO.

I. Every situation, either natural, mental, social, or governmental, is genetic, tied together. It is adjusted to its past environment. It is projected into its future environment.

II. In the growth and development of a school-teacher, he should express the past as modified and enlarged in the present, and enriched, projected, and realized in the future. He should know the line of growth that brings the pupil to him. He should know the line of growth that the pupil continues.

III. The teacher consequently should study and be trained in the public-school unit, which extends from the kindergarten to the high school, inclusive.

1. The play impulse should be appreciated by the teacher.

2. He should appreciate this impulse as it expands and expresses itself in wit and humor.

3. The racial stages of the pupil should also be understood and appreciated.

IV. This means that the normal school and the college of education must expand its work and equipment to meet and suit the growing demand of the present and the future.

1. The courses of work must be made out to suit the situation.

2. A strong and large training school should be a part of the organization.

3. Laboratories in science should be erected and maintained.

4. Libraries to suit the grades and stages of development should be liberally provided for.

5. Large museums should be connected with every department.

6. Playgrounds and gymnasiums should be erected and maintained.

7. School gardens should be constructed, kept up, and worked by the children.

8. Nurseries for plants, trees, etc., should be maintained.

9. Provision should be made for exceptional children.

10. Cooking and sewing laboratories should be added.

11. The school should be organized to be a complete social unit in the life of the institution.

V. This public-school unit must be in connection with the institution. It cannot be segregated, neither can the particular situation in which the teacher is working be segregated from the entire unit.

1. There should be a spirit of unity.
2. The personal element should be strong and powerful.
3. There should be an intelligent vision of the whole situation.
4. There should be complete co-operation of all the parts.
5. A strong professional element should permeate the entire plant and institution.

VI. There should be no crisis in the movement of any child along the public-school unit. No stage should be a preparatory stage for the one above, but the stage above should be a receiving stage for the pupils from the one below.

VII. Any institution, whether normal school, college of education, or whatever, that complies with such a preparation would be prepared to train school-teachers.

A department of education in the large college or university is likely to lose its ideal in the multiplicity of departments that have no specific relation. The unity of purpose, the professional spirit, the common purpose, the ideal of the wholeness of the situation realized at this particular point are not maintained. The interests of colleges and universities move along specific lines to such an extent that the energy is drawn away from the specific lines of work in other departments.

VIII. This conception of organization should be and would be a complete democracy, a democracy among the children giving opportunity; a democracy among the teachers giving opportunity. This leads to the thought that, opportunity being given and ability being expressed and realized in a school, there should be no discrimination as to compensation; that the individual should be compensated for what he can do, results alone being the criterion.

WHAT THE NORMAL SCHOOLS CAN DO AND OUGHT TO DO WITH THE TRAINING OF TEACHERS FOR RURAL COMMUNITIES

D. W. HAYES, PRESIDENT, STATE NORMAL SCHOOL, PERU, NEBR.

Until recent years the scheme of public education has had little regard for the man who feeds the world. While but little more than one-third of the children of the United States are in the city schools, there has been expended toward their education 55 per cent of all the moneys expended for education. Putting it in another way: nearly two-thirds of the children of the United States are in rural schools, while but little more than 45 per cent of the money invested in public education is expended for the maintenance of rural schools.

We accuse the farmer of withholding his support from the public schools. Is it not true that his extreme individualism leads him to look

for tangible and immediate returns on his investment, and that he has been discouraged in his attempts to promote the educational interests of his community by the inferior character of the teaching force available? Is it not true, Mr. Normal-School President, that we seldom recommend our best graduates for positions in the rural schools? Is it not true that the farmer has been victimized so often that he is suspicious when we ask him to pay a higher salary to obtain even *a normal-school graduate?* We accuse him of a lack of appreciation of the qualities that make up a good teacher, a good school, but may not the fault be with those in higher authority who have foisted upon his school a course of study patterned after the city school course—a course that contains very little which comes into close vitalizing touch with his occupation, his home, and his daily round of life-duties? May it not be because he has not seen a better type of school that he will still send his children to the box-car type of schoolhouse that is situated on the meanest site in the neighborhood?

The first steps necessary for the treatment of his case have been taken. Educators and statesmen have had their professional ear to the ground. They have discovered his vital relation to permanent national growth and prosperity. They have discovered that in his well-being rests the hope of the nation. They now recognize that the three greatest material factors in the growth of civilization are plants, animals, and the soil—the three factors with which he as a class must ever deal.

Certainly, then, the greatest single need of rural life today is education. This education must come thru rural schools. This necessitates more expert teaching, and finally and primarily as well, this entails more efficient training for the rural teacher. The public school is the one agency dedicated by society to the conscious application of its entire effort to the one aim of educating. The normal schools of the United States are the only agencies dedicated by society solely to the preparation of teachers to take charge of society's other formal educational agency, the public schools.

We can perhaps explain best what they can do by showing what some of the best normal schools of the country are doing today. They are coming to recognize that special training is necessary for the rural teacher. They recognize that twentieth-century conditions demand an extremely minute division of labor; that there are problems which must be met and solved by the country teacher, problems that are more complex than those which must be solved by the city teacher who is under the direction of an expert supervisor. I say, the normal schools are coming to recognize their function in the training of rural teachers; for practically everything that has been done along this line has been done within the last decade. In order to secure first-hand, definite, down-to-date information on what the normal schools are doing today with the training of rural teachers in particular, and for rural life in general, a number of questions were sent to every normal school in the United States. This was done in May, 1913.

Reports were received from one hundred of these schools, reports covering practically every state in the Union. The following questions were asked:

First: Do you have a special course for the training of rural teachers?
Second: How many years since the establishment of this course?
Third: What are the minimum entrance requirements?
Fourth: What is the length of the course, in weeks?
Fifth: What professional subjects are taught?
Sixth: Is practice teaching required?
Seventh: Do you have a model rural-school building?
Eighth: What formal work is done by your institution looking toward the improvement of rural-life conditions?
Ninth: Do you consider four years' preparation beyond the eighth grade as a practicable minimum requirement at the present time for every teacher in the rural schools?
Tenth: What ought the normal schools to do toward the solution of the rural problem?

Answers to these questions, while not recording so much of actual accomplishment, contain sentiments redolent with hope for what is being undertaken for immediate future action. Nearly all express a deep concern, and enthusiastic interest over this new function of the normal school. A summary of this report is as follows:

Question No. 1: Do you have a special course of study for the training of rural teachers? Yes, 54; No, 42; In summer school only, 4.

No. 2: How many years since the establishment of this course? Within the past year, 10. Two years ago, 10. Three years ago, 5. Between five and nine years ago, 11. Five schools reported the time of establishment as varying, dating as a rule with the establishment of the school. In most of these cases, it is to be noted that while courses of study for rural teachers have been in operation for a number of years, they were not differentiated to meet specific needs of rural teachers until within recent years. Thirteen reports did not give the time of establishment of rural-school courses, altho the writer has personal knowledge that most of these have been established within the last five years.

No. 3: What are the minimum entrance requirements? Twenty-nine schools reported completion of the eighth grade as a minimum requirement; 5, possession of a county certificate; 1, completion of the ninth grade; 10, completion of the tenth grade; 11, completion of the eleventh grade; 12, completion of the twelfth grade; while 2 were elastic. Several of these schools have two courses with different entrance requirements; hence, the seeming inconsistency in the numbers reported. There is a distinct tendency as shown by these reports to raise both the entrance and the finishing requirements.

No. 4: What is the length of the course in weeks? Thirteen of the schools report one year, ranging from 24 to 42 weeks, with an average of 36 weeks. Twenty-seven schools report a two-year course ranging from 64 to 80 weeks, with an average of 74 weeks. Five schools report a course

of three years in length with an average of 110 weeks. Six schools report a course of four years in length. Three schools report a course less than 24 weeks in length, the average being 10 weeks in length. These courses are in summer schools and perhaps should not be dignified by the name "course."

No. 5: What professional subjects are taught? In this we found a wide latitude of variation, due possibly to a difference in terminology. There seems to be a lack of well-defined notion as to what constitutes professional subjects. A synopsis of the answers shows that 28 teach elementary psychology; 31, methods; 25, school management; 16, pedagogy; 16, observation; 12, history of education; 4, education; 2, theory and principles of teaching.

No. 6: Is practice teaching required? Forty-three schools out of fifty-four that reported special courses for the training of rural teachers require practice teaching. The time allotted to practice teaching was found to have wide variation. In some cases the students put in full time in practice teaching, so that the number of weeks devoted to it under these conditions would of necessity be limited. In other cases one period a day is required. The figures, therefore, given under this question will not be as useful from the standpoint of scientific investigation as they should be. Four schools require from 2 to 10 weeks; nine schools, 12 weeks; thirteen schools, from 16 to 24 weeks; ten schools, from 30 to 40 weeks; schools reporting practice teaching, but time not given, 5; one school requires 200 periods and another 270 periods.

No. 7: Do you have a model rural-school building? This question seems to be worthy of giving a more detailed account. Those having a model rural school are twelve: DeKalb, Ill.; Garham, Me.; Kalamazoo, Mich.; Kirksville, Mo. (Kirksville had "the first in the world," according to report); Keene, N.H.; Mayville, N.D. (this is a two-teacher school and is believed by the authorities reporting to be the best of its kind in the United States); Providence, R.I. (this is also a two-room building as part of the model schools); Rockhill, S.C.; Castleton, Vt.; Cheneys, Wash. (this school has had a series of demonstration schools for the past five years; there are five of these demonstration schools located in five counties and it is expected that five more will be established in the near future); Huntington, W.Va.; and Stevens Point, Wis. Four model rural-school buildings will be constructed within a very short time as follows: San Diego, Cal., in September, 1913; Normal, Ill., next year; Bowling Green, Ky.; and Alva, Okla. Four normal schools use affiliated rural schools for demonstration and practice purposes. These are: Chico, Cal.—uses two rural schools; Lewiston, Idaho—has training centers in rural communities; Boston, Mass.—has practice teaching in the rural schools of the region; and Kent, Ohio. Three normal schools report model rural schoolrooms.

These are: Northampton, Mass.; Peru, Nebr.; and Kearney, Nebr. Other normal schools write of their intention to have model rural-school buildings within the biennium.

No. 8: What formal work is your school doing toward improving rural-life conditions? Among the different subjects which are being taught, the following predominate in about the order given. Agriculture, manual training, domestic economy, nature-study, rural sociology, rural economy, and elementary science. Other work is being done such as lectures on sanitation, art, music, rural-life problems, extention courses, publication of bulletins, sending faculty members out to visit rural schools, and having faculty members give instructions in the handling of classes and other school problems. Co-operation with rural improvement leagues. Some say: "We are teaching teachers to be rural minded, not city minded. We are teaching them that the slogan should be 'stay on the farm' rather than 'back to the farm.'" Others teach teachers how to organize corn clubs, contests, and other exhibits. Some of the normal schools have extension departments employing as many as five persons.

No. 9: Do you consider four years' minimum preparation beyond the eighth grade as a practicable minimum requirement for rural teachers at the present time? Yes, 40; Not yet, 17; No, 17; Not practicable, 2; No report, 23. Thus, it would seem that about 50 per cent of the schools reporting are of the opinion that a standard of four years' work beyond the eighth grade is too high for us to make as a minimum requirement, at the present time.

It is a well-known fact that the ideal course advocated by the normal schools for the elementary teacher in the grades is four years beyond the completion of the twelfth-grade high school. Yet only about one-half of the normal schools reporting seem to feel that it is practicable to require the equivalent of a high-school course to fit one to teach in the country. It seems to me that the position of the normal school should be either to lower our standard of ideals for the requirements of the elementary teacher in the graded schools, or else to raise our ideal of the qualifications to be required of the teacher of the rural school. The following represents the situation today: A teacher is considered qualified to teach a boy in the country school if she has, on an average, completed two years beyond the eighth grade. But she is not good enough to teach the same boy if he happens to be attending school in the grades in a city school, unless she has had six years' preparation beyond the eighth grade. Again, the teacher whom we recognize as qualified to teach the eighth-grade boy in the country, if she has completed two years' work beyond the eighth grade, is not considered qualified to teach this same boy in the ninth grade in the city unless she has had *eight* years' preparation beyond the elementary schools. This is one of the greatest inconsistencies of which the normal-school men, college men, and other educators, are guilty today. An illus-

tration of this inconsistency is found in the requirements of the teacher who is placed in charge of the ungraded room in the city. Here we demand the services of a skilled expert, altho an expert supervisor may be at hand for consultation at any moment. In the ungraded room in the country we are content to place the most inexperienced, the most immature, to whom the law will permit the granting of a license. We have noted in recent years that a number of the cities are requiring of their teachers experience in the country, as a prerequisite to their receiving a license in the city. Is there not as much justice in reversing the operation and requiring experience in the city before the license is granted to teach in the country?

No. 10: What ought the normal schools to do toward solving the rural problem? The answers to this question form, in my opinion, an interesting chapter in normal-school history.

From my own observation and experience in the preparation of rural-school teachers, it seems that it is the function of the normal schools to train resident leaders in the country. This may be done by offering a course of study that will prove attractive to the young men and young women of power and character. These courses should contain the subjects, the so-called practical subjects, that are of direct and vital interest to the farming community—such as manual training, rural sociology, rural economics, agriculture, domestic economy, and school gardening.

These courses should contain provisions for instruction in playground supervision, in art, and in music. It is just as necessary that the child in the rural school, in order to increase the number of satisfied wants, have the so-called cultural subjects, as that he be taught seed corn testing, cattle-judging, or the balanced ration. As the home is the center of civilization, so all the home subjects must be found in the courses of study which will be offered in the rural schools. The normal school must not neglect to teach the rural-school teacher the plan of organization of her school, requirements of the rural-school course of study, nor the larger and more vital field of rural leadership.

The farmer's boy and girl must be taught a new attitude toward home life. Teachers must create a new point of view, a new atmosphere. They must develop a native leadership. They must teach the country folk to develop their own native resources, whether material or spiritual. Rural people must come to know that a rural organization may supply as completely as the city the four great requirements of man: health, education, occupation, and society. They must be taught to abandon the cow path for the macadamized road; to exchange the box-car shack for a real schoolhouse. Other agencies have done much work toward lifting the agriculturist out and away from himself. Our great agricultural colleges have been a godsend, tho there is some danger that they are placing too much stress on remuneration; on money-making, rather than on teaching how

to live more happily and how to have community ideals. The so-called model farms that have been conducted in many parts of the country have not been altogether successful. Expensive machinery and multiplicity of detail has caused the farmer to look upon them suspiciously. One of the ways in which improvement in service may be brought about among the country teachers is by sending out faculty members into rural communities, who are competent to direct the schoolroom work, and to assist the county superintendents and the individual teacher in redirecting method and course of study. This redirection may mean not only a change in course of study, but will mean new life and new method in the conventional studies that have been taught during the ages. Thus, literature and composition may be so taught that they will use the beauty of nature, the growing of the Indian corn, the ripening of the golden grain, the rugged woodland, and the sweet-scented clover field. Again the courses of study that are offered in the normal schools should be such as may be fully accredited toward the completion of more advanced courses. In times past, normal schools have discouraged rather than encouraged students who have been desirous of preparing for rural-school teaching. They have said: "You cannot expect to receive advanced credit on many of the subjects offered in these courses."

In conclusion, let us remember that what is done for rural life must be done thru a vitalized living contact with farm folk. His condition will not respond to "absent treatment." All the present tendencies point to a better condition in the rural school. We were never so thoroly alive to the question as we are today. While the aroused normal-school conscience has waited until the day is far spent, blessed be the present awakening. When a considerable number of the country schools shall have teachers with special training to teach them a due appreciation of beauty and truth as exhibited in blade and flower, in hill and dale, in lake and cloud; when the rural-school teacher is content to spend her life in the country and take her place among country folk, then will the sons and daughters of the country in the next generation be in sympathy with the farm and with rural life.

DEPARTMENT OF MANUAL TRAINING AND ART EDUCATION

SECRETARY'S MINUTES

President—Arthur L. Williston, principal, Wentworth Institute.....Boston, Mass.
Vice-President—Lillian S. Cushman, School of Education, University of Chicago..Chicago, Ill.
Secretary—Irene E. McDermott, director of household arts, public schools...Pittsburgh, Pa.
Corresponding Secretary—R. W. Selvidge, professor of manual arts, Teachers College, University of Missouri, Columbia, Mo.

FIRST SESSION—Monday Forenoon, July 7, 1913

The meeting was called to order by President Arthur L. Williston in the First Methodist Episcopal Church, Salt Lake City, Utah, at 9:40 A.M. In the absence of the secretary, Irene E. McDermott, on motion, J. A. Randall, head of Department of Physics, Pratt Institute, Brooklyn, N.Y., was appointed secretary *pro tempore*.

President Williston introduced the first speaker, E. E. Scribner, superintendent of schools, Ishpeming, Mich., who presented an address on "Bringing Vocational Work of the Public Schools Closer to Business Interests."

The second paper read was on "Diagnosing a Community's Needs as a Basis for Vocational Schools," by H. B. Wilson, superintendent of city schools, Topeka, Kans. At the request of the president, this paper was read by M. H. Stuart, of Indianapolis, Ind.

A discussion of the two preceding papers was opened by D. W. Parrott, ex-supervisor of manual training, public schools, Salt Lake City, Utah. The discussion was continued by Alvan N. White, state superintendent of public instruction, of Sante Fe, N.M.; Jacob H. Tipton, University of Utah, Salt Lake City, Utah; R. W. Selvidge, University of Missouri, Columbia, Mo.; I. I. Cammack, superintendent of schools, Kansas City, Mo.; and Lewis M. Gillilan, principal of the Technical High School, Salt Lake City, Utah.

"The Report of the Committee on College-Entrance Requirements" was then presented by the chairman, Arthur L. Williston, principal of Wentworth Institute, Boston, Mass.

On the completion of the reading of the report, it was moved and seconded that the report, including the seven recommendations contained therein, be adopted, and that the committee be continued and use such means as are found practical to bring these recommendations to the favorable consideration of school and college authorities. The motion was carried.

SECOND SESSION—Wednesday Forenoon, July 9, 1913

The meeting was called to order by the president at 9:40 A.M. The first paper on the program was the presidential address, "There Are Many Different Kinds of Boys and Girls for Whom Are Needed Many Different Types of Schools," which was presented by Arthur L. Williston.

The second paper of the morning was an address by Carroll G. Pearse, superintendent of schools, Milwaukee, Wis., on "The Continuation School in Public Education."

A discussion of the two papers was opened by Arthur H. Chamberlain, of San Franciso, Cal., and continued by James Ferguson, principal of the Polytechnic High

School, San Francisco, Cal., Robert J. Fuller, superintendent of schools, North Attleboro, Mass., and others.

The "Report of the Committee on Vocational Education and Vocational Guidance" was then presented by the chairman, Robert J. Fuller, superintendent of schools, North Attleboro, Mass.

At the completion of the presentation of the report, it was moved and seconded that the committee's report in its preliminary shape be adopted with thanks and with the expressed hope that the committee would continue its work along the lines indicated and carry it to completion. The motion was passed.

It was also moved that the Department of Manual Training and Art Education earnestly recommend to the Executive Committee of the National Education Association that a sufficient sum of money be appropriated to enable this committee to carry out the plans as projected. The motion was carried.

Announcement was made of the nominating committee as follows:

J. Leo Fairbanks, Salt Lake City, Utah.
Alba Bales, Lewiston, Idaho.
Ednah A. Rich, Santa Barbara, Cal.
Arthur H. Chamberlain, San Francisco, Cal.
J. A. Randall, Brooklyn, N.Y.

Motion was made by R. J. Fuller, of North Attleboro, Mass., that a new name be given to the department which should more accurately express all the different types of work which come within its scope and which should contain the word "Industrial," and that a committee of three be appointed to consider this matter; to give the appropriate notice required by the constitution of this desired change; and to report at a later meeting. The motion was passed unanimously. The committee appointed was as follows:

R. J. Fuller, North Attleboro, Mass.
Arthur H. Chamberlain, San Francisco, Cal.
James Ferguson, San Francisco, Cal.

It was moved and seconded that a committee of three be appointed to represent the department and to co-operate with the Department of Education regarding the exhibit of 1915 at the Panama-Pacific International Exposition in relation to the subjects of manual training, industrial education, home economics, and fine arts. The motion was passed.

During the session several musical selections were rendered which added to the enjoyment of the members.

THIRD SESSION—Wednesday afternoon, July 9, 1913

This session was called to order by the president at 2:45 P.M.

He introduced J. Leo Fairbanks, painter and sculptor, of Salt Lake City, Utah, who had been invited to preside at this session, which was to be exclusively devoted to education in the fine and applied arts.

Mr. Fairbanks made a brief introductory address and then introduced the first speaker, Robert B. Harshe, assistant chief, Department of Fine Arts, Panama-Pacific International Exposition, San Francisco, Cal., who presented an address upon the topic "Art and American Life."

The second address was delivered by Thomas A. Mott, superintendent of schools, Richmond, Ind., who spoke on "The Schools as Art Centers." Mr. Mott's address was charmingly illustrated with lantern slides.

This paper was followed by an address by May Gearhart, supervisor of art, public schools, Los Angeles, Cal., on "The Relation between the Home and Art Instruction in the Elementary Schools."

J. L. Brown, Brigham Young University, Provo, Utah, opened the discussion of the three preceding papers.

During the afternoon, several delightful musical selections were rendered by representatives from Brigham Young University, Provo, Utah, which added much to the enjoyment of those present.

At the close of the discussion, the meeting, on motion, adjourned.

FOURTH SESSION—Thursday Afternoon, July 10, 1913

Joint Session with the Departments of Secondary Education and Science Instruction

The meeting was called to order in the Assembly Hall, Temple Square, Salt Lake City, Utah, by J. G. Collicott, superintendent of schools, Indianapolis, Ind., who had been invited to preside. Ira M. Allen, vice-president of the Department of Secondary Education, acted as secretary. Addresses were given by:

L. D. Anderson, superintendent, United States Milling, Mining, and Refining Company, of Midvale, Utah, on "What Do the Industries Require?"

Ernest O. Holland, superintendent of schools, Louisville, Ky., on "What the Schools Can Do to Meet the Demands of Both Industry and General Science." (For this paper, see Department of Science Instruction.)

William B. Owen, principal, Chicago Normal School, Chicago, Ill., on "How Far Should Both Academic and Manual-Arts Courses in the High Schools Be Bent to Meet the Needs of Specific Vocations?"

Following these papers, the "Report of the Joint Committee on the Improvement of Physics Teaching" was presented by its chairman, J. A. Randall, head of the Department of Physics, Pratt Institute, Brooklyn, N.Y. (For this report, and the action thereon, see Department of Science Instruction.)

FIFTH SESSION—Friday Forenoon, July 11, 1913

Joint Session of the Department of Manual Training and Art Education with the Departments of Rural and Agricultural and Elementary Education

The meeting was called to order by Arthur L. Williston, of Wentworth Institute, Boston, Mass., at 9:40 A.M., in the Tabernacle, Temple Square, Salt Lake City, Utah. E. C. Bishop, secretary of the Department of Rural and Agricultural Education, acted as secretary.

After a brief introductory address, Mr. Williston pr nted, as the first speaker, Perry G. Holden, director, Agricultural Extension Department, International Harvester Company, Chicago, Ill., who made an address on "Rural Schools and Community Needs."

The second address of the morning was a paper on "Agriculture and Gardening in the Public Schools" prepared by Clayton F. Palmer, supervisor of school gardens, Los Angeles, Cal. (For this paper, see Department of Agricultural Education.)

The third address was by W. A. Jessup, director, School of Education, State University of Iowa, Iowa City, Iowa, upon the subject, "Some Eliminations in the Content of Arithmetic as a Factor in the Economy of Time." (For this paper, see Department of Elementary Education.)

The discussion of the papers was opened by L. R. Alderman, superintendent of city schools, Portland, Ore.

On motion, the meeting extended a hearty vote of thanks to Mr. Holden and the other speakers who had come such long distances for the purpose of presenting addresses.

SIXTH SESSION—Friday Afternoon, July 11, 1913

The program for this session was arranged in co-operation with the American Home Economics Association.

The meeting was called to order by the president of the department at 2:40 P.M. in the First Methodist Episcopal Church, Salt Lake City, Utah.

He introduced Jessie M. Hoover, professor of home economics, University of Idaho, Moscow, Idaho, who, as the representative of the American Home Economics Association, had been asked to preside at this meeting. Miss Hoover made a brief introductory address.

The first speaker of the afternoon was Caroline Bartlett Crane, social and sanitary expert and investigator of municipalities, Kalamazoo, Mich., who spoke upon the subject, "Life, too, Is an Art."

The second paper was by Irene E. McDermott, director of household arts, public schools, Pittsburgh, Pa., upon the subject, "The Contribution of Industrial Education for Girls toward Efficiency and a Fair Minimum Wage." In the absence of Miss McDermott, her paper was read, at the request of the president, by Ednah A. Rich, president, State Normal School of Manual Arts and Home Economics, Santa Barbara, Cal.

The next paper was by Alba Bales, head of Domestic Science Department, Lewiston Normal School, Lewiston, Idaho, upon the subject, "Some Ideals in Home Economics Teaching."

The discussion of the three preceding papers was opened by P. P. Claxton, United States commissioner of education, Washington, D.C., with an eloquent address upon "The Importance of Home Economics in American Education."

At the close of the discussion, a business meeting of the Department of Manual Training and Art Education was called to order.

The nominating committee reported as follows:

For *President*—Arthur L. Williston, principal, Wentworth Institute, Boston, Mass.
For *Vice-President*—May Gearhart, supervisor of arts, public schools, Los Angeles, Cal.
For *Secretary*—Irene E. McDermott, director of household arts, public schools, Pittsburgh, Pa.
For *Corresponding Secretary*—D. W. Parrott, ex-supervisor of manual training, public schools, Salt Lake City, Utah.

Upon motion, the secretary was instructed to cast the ballot of the entire meeting for the names read for each of the offices mentioned. The officers were unanimously elected.

The committee on the change of name for the department presented the following report thru its chairman, Robert J. Fuller, of North Attleboro, Mass.:

WHEREAS, it has been found that the name which this department is now generally using is an abbreviation which does not represent all of the interests included in the complete name:
The committee recommends that during the coming year the name "Department of Manual Arts and Vocational Education" be used;
And the committee further recommends that notice be filed at the general business meeting of the Association at this convention of the proposed amendment to the by-laws to change the name permanently to that given above.

The motion was carried.

It was moved and seconded that the president be authorized to appoint a committee of five to represent this department in any matters that may arise during the coming year in connection with state or national legislation upon the subject of vocational education.

The motion was carried.

The following motion, made by D. W. Parrott, of Salt Lake City, Utah, was duly seconded and unanimously carried:

That a vote of thanks and hearty congratulation be given to President Williston for the hard and conscientious work that he has devoted to the upbuilding of the department, and for the great success which he has hereby produced at these meetings.

It was moved and seconded that the thanks of the department be extended to the members and officers of the First Methodist Episcopal Church, of Salt Lake City, Utah, to the members of the local committee that had charge of the arrangements, to the

representatives of the Brigham Young University of Provo, Utah, and to the musicians who added to our enjoyment with musical selections, for the many kindnesses and courtesies that were extended to the department during the fifty-first annual convention of the National Education Association in Salt Lake City. The use of the church building, the efficient and appropriate arrangements, the delightful music, and the delicious refreshments were all especially appreciated.

The motion was unanimously carried.

On motion, the meeting adjourned.

J. A. RANDALL, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

BRINGING VOCATIONAL WORK OF THE PUBLIC SCHOOLS CLOSER TO BUSINESS INTERESTS

E. E. SCRIBNER, SUPERINTENDENT OF SCHOOLS, ISHPEMING, MICH.

In the pioneer days of our country's history, the schools and the business interests were widely separated in function. In the early days it was thought that it was only necessary to educate the clergy; that thru them the educational needs of the common people could be ministered to. Trades were taught by apprenticeship, and minors were bound out until they should attain their majority, for the purpose of learning a trade. Under that system, there was little need for the schools to study the industries and undertake to help or direct vocational training. The schools, therefore, consistently limited their efforts to the study of the classics, to the history of the race, to philosophy, and to science. The colleges were classical in their training; academies were established to prepare for the colleges; the common schools came last, in the beginning, maintained by per capita tax; and finally, the free common school was instituted and supported by public taxation.

As society developed, machines were invented and the country experienced a marvelous growth in manufacturing. Machinery caused a division of labor, so that the trades, which were formerly learned thru the apprenticeship system, were divided. In other words, specialization was necessary to increase the efficiency of the workers and decrease the cost of production. As a natural outcome of this change, the apprenticeship system weakened and has almost, if not entirely, disappeared.

Our industrial growth was so rapid and the increase in production so great that the business world did not at first appreciate what the loss of the apprenticeship system meant to the industries. Those who possessed industrial foresight realized that to compete in the markets of the world, industrial pursuits must be directed by men scientifically trained. So industrial schools were privately endowed. I believe that the first school for industrial education, established in the United States, was Cooper Union. After that came the Mechanics Institute and others located in

cities that were centers of industries. These schools in the beginning held their sessions only in the evening.

In 1862 Congress passed the Morrill Act, which set aside public lands to the several states for the purpose of establishing state universities. These universities offered courses in agriculture and engineering and awarded degrees to those students who completed the course.

Training in mechanic arts in the United States, as you see, first began with private endowed institutions and finally extended to state universities and secondary schools. These institutions which we call schools of technology and engineering have been wonderfully successful in training industrial leaders. Expert critics tell us that they compare favorably with the best schools in Europe. However that may be, they have trained men who have proven their value in the marvelous increase in the efficiency of labor in the production of wealth. The feats of the modern engineers in almost every field of industry are the marvel of the age, and their skill is due to the splendid training they have received in our technical schools.

But these schools do not reach the masses. They offer opportunity to the ambitious of all classes, but they do not reach that class, which the critics of the public schools say amounts to about 92 per cent, who leave the schools at the expiration of the compulsory education age and go out into the world to make a living. The critics charge that the schools are paying too much attention to the education of the 8 per cent who follow commerce and the professions as a life-work, and neglect the 92 per cent who go out to meet the conditions of modern life in the industrial world.

Manual-training courses have been established in our public high schools, and technical high schools have been built in very large numbers thruout the United States in recent years. In fact, manual training has become the hobby of the period in education. But the results obtained from these elementary public schools have not been altogether satisfactory. Statistics gathered from about twenty-five hundred students, trained in the manual-training high schools of Massachusetts, show that only fifty-two were found in the mechanical trades.

Manual training has unquestionably attained an enviable position in our system of general education. It unquestionably gives the student a broader outlook upon life and enables him to look with greater respect upon manual labor. But, it seems to me, it should do more than that. It should discover the capabilities of the individual pupil and direct him to the vocation for which he is best fitted by nature. How can that be done? I do not believe that the industrial school can ever take the place of the apprenticeship system in the industrial world, but I do believe that it is possible for the industrial work in our public schools more nearly to bridge the chasm caused by the loss of the apprenticeship system and to minister better to the needs of modern industry.

Since the school is maintained at public expense or at the expense of the

business interests, and really exists for the sole purpose of developing the business men and women of the future, it is evident that there should be perfect harmony between the school authorities and the business interests; that they should co-operate and that the business interests should at all times be in touch with the schools.

The aim of industrial education, in the language of Dr. Kerschensteiner, "is to insure personal efficiency and enable the pupil to take that part in society which his capabilities warrant. The first place must be assigned to training in trade efficiency." In other words, a pupil is not being fitted as a worthy member of society who is not acquiring the power to make a living. He says:

> A useful citizen is one who contributes by his work, directly or indirectly, to the attainment by the state of its goal, as a legal and cultural community. The first task of the school is the promotion, so far as may be, of the skill as well as the joy in the work of the pupil. The second task is the early accustoming of the pupil to placing his joy and skill in work in the service of his companions and fellow-men, as well as of his own. The third task is the connecting of the so-built-up readiness for service, consideration, and ethical devotion, with an insight into the purpose of the state, so far as such an insight can be developed in the pupils, considering their position and degree of maturity.

The great German school superintendent has thus ably summed up the purpose and possibilities of education—the complete development of the whole man. If the hand is skilled, the head is trained, and the heart is right, there is no limit to the possibilities for public service in that individual.

If the public schools are ever to approach more nearly that ideal development, it seems to me that there are three agencies which must work together in perfect harmony. In the first place, the household must do its work. The things we learn from our fathers and mothers we never forget. They become incorporated into our being and become almost instincts. If we have learned at home to be industrious and loyal to the home interests, to love and honor the truth, and to hate, as men hate filth, all lying or double dealing—if that is firmly ingrained, a child will carry that business asset to the end of life. The school should keep in much closer touch with the home. The home environment should be known to the teacher and the school authorities. When the child reaches the age of twelve or thirteen, the school should confer with the home for the purpose of learning what the future plans of the home are for the child. If the information indicates that the child must leave school at the expiration of the period of compulsory attendance, the school and the home should counsel together as to the natural bent of the child and the occupations and the vocations which are available for the object of guiding him to the vocation which is best fitted to his temperament and capability. The schools should keep a record of each case and follow the young worker, giving wise counsel as difficulties arise owing to the newness of the work and the strangeness of the environment. That is, keep in touch until the success of the worker is assured.

Next, the school must give closer study to industrial conditions. The schools should know what industries offer the best opportunities to those who must seek employment early, because of necessity or dislike of the drudgery of school work. Again, there must be aroused a public sentiment among those who manage the industries which will cause them, without fear or favor, honestly and earnestly to co-operate with the schools, and thru the schools with the home, for the purpose of placing the pupil who must leave school in a place where, if he is industrious, he will succeed and thru success be contented and happy. Again, the co-operation of business interests should be secured so that boys who are attending our schools could be sent out stated hours each week to do practical work in the shops of the community. In this way the business interests, of course, would be brought in closer touch with what the schools are attempting to do, and the schoolmasters would learn what the shops expect of the schools, so that each would be helpful to the other. Very many business men criticize the schools because they are not in sympathy with the developing boy and consequently have no patience with the worker, who is also the learner. This attitude is not in keeping with the true spirit of helpfulness and really works to the disadvantage of the business interests. At best, the schools can supply but limited practical education because of the expense of machinery. The school can do the drawing and the theoretical work as well as the shop, but practice of the theories taught in the schoolroom should be put into execution in the atmosphere of practical business, where efficiency is the watchword and economy the practice.

We schoolmasters have our limitations; there are a few things we do not know. Our training has not been along the same lines with the man who is risking his money in the manufacturing of articles which are to compete for profit in the markets of the world. Those men are usually forehanded; we are mostly empty-handed. We are not experts, nor can we ever be, in training boys and girls for industries. The aim of the industrial school, or of the industrial course in our public schools, is to fit the students to become efficient workers in the industries. The success of industrial schools, like everything else, depends upon organization and management. To bring the vocational training of the schools closer to business interests those schools should be controlled by industrial experts—by men who are making industrial conditions a study, who anticipate, thru their expert knowledge, industrial changes and arrange their business to meet these changes with as little loss as possible.

Industrial schools both in the United States and in Europe are still in the experimental stage. We know that the industrial work has accomplished much, but I do not think that any one of us is willing to say that they have reached the ideal stage. To bring them closer to that stage and nearer to the business interests, I believe that there should be established a federal vocational bureau which will have representatives in every com-

munity; that this bureau should be composed of both capitalists and representatives of organized labor; that they should be represented on all school boards with the right to suggest, if not the right to vote on all measures affecting the vocational work of the public schools. Thru such a bureau, I believe that public schools would be stimulated and that vocational work would be vitalized and energized. It would bring co-operation between trade unions, capital, and the state, and place industrial training upon a scientific basis, which would bring to the school the confidence of all classes. It would also standardize industrial work and give the industrial school the benefit of friendly, constructive criticism from men trained in the commercial shops and factories.

The public school is in a period of transition, based upon the change in industrial conditions. It is not a sentiment, but an aspiration toward a better order of society. A transition with such a noble aspiration exhibits, even in its catastrophies, and its transitory errors, a youthful vigor and vitality which promise long and glorious periods of growth. Industrial education is so vast in its possibilities that it seems as boundless as the past and as unsolvable as the future. But patient, definite, organized study on the part of all the forces interested will produce results which will insure success and enable our industries to hold their own in the markets of the world because of the co-operation and intelligent efficiency of their employees.

REPORT OF COMMITTEE ON COLLEGE-ENTRANCE REQUIREMENTS

At the meeting of the National Education Association in Boston, three years ago, resolutions were adopted by the Department of Manual Training and Art Education urging colleges and universities to grant to applicants for admission greater freedom in the choice of subjects that they might present for entrance into college; and urging upon the colleges and universities the recognition of drawing, shop work, and household economics as accepted entrance subjects, whenever these subjects are well taught and form a part of a well-planned and approved high-school course.

In addition to the passage of these resolutions, a committee was appointed by the department with instructions to further the spirit and purpose of the resolutions in every possible way.

The committee made a preliminary report at the San Francisco meeting of the Association, describing its work in securing and distributing information regarding the colleges, and calling attention to the tendency toward decidedly more liberal requirements especially in the subjects in which this department is especially interested. Again at the Chicago meeting, a year ago, the committee made a second report of progress, giving further facts and pointing out certain tendencies observed in the relation

of the colleges and the preparatory schools. This second report was not as complete as it otherwise would have been, for the reason that we were waiting for the Report on College-Entrance Requirements by the United States Bureau of Education, compiled by C. D. Kingsley, agent of the Massachusetts Board of Education and also a member of this committee.

This report of the Bureau of Education is now out, and is, of course, fuller and more complete as a source of information than any report could well be that was made entirely by volunteer workers.

Thruout the whole work of the committee, the question of obtaining a more appropriate recognition for the subjects of drawing, shop work, and household economics has always been regarded as an integral part of the larger question of the whole relation of colleges to the preparatory schools. To attempt to separate it would be a mistake. The work of the committee has shown plainly that it is tied up with the prescribed requirements in language, mathematics, history, and science, and also with the electives in other subjects that are now demanding a more generous recognition.

The greatest hope of gaining the objects set forth in the Boston resolution lies in the direction of obtaining a decrease in the proportion of credit given to the subjects on the prescribed list; and of using all the subjects that are seeking recognition as a combined argument for broadening the elective list, or giving to the subjects on the elective list a larger proportion of total credit.

The following tables are compiled from data taken from the report of the United States Bureau of Education referred to before. They will show just what conditions are at the present time and the exact extent to which drawing, shop work, and household economics are now being accepted by American colleges and universities of each of the types named.

TABLE I

INSTITUTIONS INCLUDED: 203 LIBERAL ARTS COLLEGES GRANTING THE A.B. DEGREE

Maximum Credit Units Acceptable	Drawing	Shop Work	Household Economics
4 or more	22	20	19
3 or more	5	11	11
2 or more	17	25	17
1 or more	67	33	28
½ or more	13	8	4
Total	124	97	79
Will consider	10	9	10
Grand total	134	106	89
Number of institutions granting no credit	69	97	114

NOTE.—The credit unit referred to in this report is that adopted by the Carnegie Foundation and is defined as follows: "A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work."

Two hours of drawing, manual training, or laboratory work are generally assumed to be equivalent to one hour of classroom work.

In the foregoing table, the figures in the first column are the number of credit units that are acceptable in each of the subjects given in the headings of the following columns. The words "or more" after the figures should be understood to mean "or more, but less than the figure immediately above."

The figures in the second column indicate the number of institutions in the class indicated in this table that will accept in drawing the number of credit units indicated by the corresponding figure in column one. The figures in columns 3 and 4 give the corresponding information for shop work and household economics respectively.

The summary at the foot of the table gives the total number of institutions that will give credit for from one-half unit to four units in the three subjects; the number that will consider the subjects, but that do not advertise the extent to which they will give credit; the grand total that will in any way consider the subjects; and the number that decline to give any credit whatsoever.

While the figures given in the last line of Table IV are not strictly comparable with the figures collected for the report of a year ago, because

TABLE II

INSTITUTIONS INCLUDED: 85 COLLEGES OF ENGINEERING

Maximum Credit Units Acceptable	Drawing	Shop Work	Household Economics
4 or more	7	10	9
3 or more	5	10	2
2 or more	16	21	11
1 or more	45	28	15
½ or more	4	2	2
Total	77	65	39
Will consider	3	3	5
Grand total	80	68	44
Number of institutions granting no credit	5	17	41

TABLE III

INSTITUTIONS INCLUDED: 31 COLLEGES OF AGRICULTURE

Maximum Credit Units Acceptable	Drawing	Shop Work	Household Economics
4 or more	9	10	10
3 or more	3	5	3
2 or more	4	7	5
1 or more	13	7	8
½ or more	2	2	2
Total	31	31	28
Institutions granting no credit	0	0	3

TABLE IV

SUMMARY

Type of College	Total Number	Giving Credit for Drawing	Giving Credit for Shop Work	Giving Credit for Household Economics
A.B. degree	203	134	106	89
College of Engineering	85	80	68	44
College of Agriculture	31	31	31	28
Totals	319	245	207	161
Percentage		76.8	64.9	50.5

the number of colleges included in the earlier report was smaller, being but 188, nevertheless the contrast of the figures in the two reports, but a year apart, is interesting.

REPORT OF LAST YEAR

Number of colleges considered 188
Percentage granting some credit in one subject—either drawing, shop work, or household economics 66
Percentage granting credit in two subjects 50
Percentage granting credit in three subjects 44

Tables I, II, III, and IV show the extent to which entrance credit for drawing, shop work, and household economics is already being given. Before these figures can be materially increased, it will probably be necessary to decrease the number of units at present definitely prescribed for entrance in other subjects. An accurate knowledge of the present practice in this particular is, therefore, of interest and value; and the committee has therefore compiled data of this kind in the following table.

TABLE V

NUMBER OF UNITS PRESCRIBED FOR ENTRANCE IN EACH PRINCIPAL GROUP OF SUBJECTS

Subject	Average of 203 A.B. Colleges	Average of 85 Engineering Colleges	Average of 31 Agricultural Colleges
English	2.9	3.0	2.9
Mathematics	2.3	3.1	2.2
Languages	4.0	2.0	1.2
Science	0.5	1.0	1.0
History and Social Science	1.0	.9	.8
Vocational Subjects	0.0	0.1	.0
Total units prescribed	10.7	10.1	8.1
Elective units permitted	4.3	4.9	6.9
Total	15	15	15
Elective units permitted in vocational subjects	1.9	2.8	4.2

In the first column of the foregoing table are given the several groups of subjects which are usually prescribed for college entrance. In the second column are given the figures for each one of these groups of subjects obtained by averaging the definitely prescribed requirements for 203 liberal arts colleges granting the A.B. degree. In the third and fourth columns are given the corresponding data for 85 engineering colleges and 31 agricultural colleges, respectively.

Table V shows that on the average for the 203 liberal arts colleges there is a total of $10\frac{7}{10}$ definitely prescribed units; for the 85 engineering colleges there is on the average a total of $10\frac{1}{10}$ definitely prescribed units, and for the 31 agricultural colleges the corresponding figure is $8\frac{1}{10}$.

There is left, therefore, to be selected among the various groups of electives, a total of $4\frac{3}{10}$ units for the average of the 203 liberal arts colleges; a total of $4\frac{9}{10}$ units for the average of the 85 colleges of engineering; and a total of $6\frac{9}{10}$ units for the average of the 31 agricultural colleges.

The number of units of vocational subjects which may be offered as a part of the total electives is given in the last line of Table V. On an average, the 203 liberal arts colleges will accept a total of not more than $1\frac{9}{10}$ units; on an average, the 85 engineering colleges will accept a total of not more than $2\frac{8}{10}$ units; and on an average, the 31 agricultural colleges will accept a total of not more than $4\frac{2}{10}$ units of vocational subjects.

It is unquestionably true that American high schools have seriously suffered in the past from an attempt to teach too many subjects in their endeavor both to satisfy the requirements of different colleges and to meet local community needs. They have felt that they could not disregard the growing demand to provide education directly related to industry, commerce, and the social life of their communities, and they have wished also to meet the requirements of those colleges to which certain of their pupils wished to go.

This condition, however, has apparently reached a point from which reaction is inevitable.

It is generally recognized that the lowering of college-entrance requirements is not the right way to produce the relief. This would weaken both the high schools and the colleges.

On the other hand, maintaining rigid and definitely prescribed college-entrance requirements can result only in widening the present gap between the high schools and the colleges, and in crippling college work by increasing the number of conditioned and poorly prepared students.

It is evident that the only improvement in this situation can come about from continuing to make the college-entrance requirements more flexible so as to meet the varying needs of different schools and different communities. In this direction of greater flexibility of entrance requirements, your committee believes that the high schools of the United States may confidently expect increasing co-operation from the colleges, for, in

the long run, the interests of both are identical, and the colleges appear to be ready to recognize this.

Investigation has shown that the quality of college work is much more intimately related to the quality of work done by students before entering college than it is to the nature of the subject or subjects that were included in the preparatory course. In other words, the facts show that efficient work in college is best insured when it is based upon thoro and efficient work in secondary schools. It is, therefore, for the welfare of the college and university, quite as much as it is for the high school, that the latter should do its work under the most favorable conditions.

This means that the high school must be free to recognize different kinds of ability in different individuals; free to profit by the increased interest that comes from educating boys and girls in the directions that are related to their life-experience and that they believe to be worth while; and free to concentrate energy upon a reasonable number of lines of work. This freedom, however, can be obtained only when colleges require but a small number of definitely prescribed units for college entrance and permit electives from a wide variety of subjects.

In order to express in more definite form the minimum degree of flexibility in college-entrance requirements that your committee regards as essential, the following recommendations are respectfully submitted to American colleges and universities:

RECOMMENDATIONS FOR COLLEGE-ENTRANCE REQUIREMENTS BY THE DEPARTMENT OF MANUAL TRAINING AND ART EDUCATION OF THE NATIONAL EDUCATION ASSOCIATION

First: That not more than one-half of the total credits required for entrance to college be prescribed.

Second: That whenever subjects are prescribed for entrance at least three (3) units of English be included in the prescribed list.

Third: That not more than three (3) units of foreign language (either Latin or German or French) be included in the prescribed list.

Fourth: That not more than (2) units of mathematics be included in the prescribed list, excepting for colleges of engineering.

Fifth: That not more than one (1) unit each of natural science or of history and social science be included in the prescribed list, excepting where no foreign language is prescribed.

Sixth: That at least one-half of the total credits required for entrance be elective from any subjects included in a regular four-year course of an approved high school.

Seventh: That a total of at least four (4) credits be accepted in each of the following six groups of subjects: English, foreign language, mathematics, natural science, history, social science, and vocational subjects (including drawing, shop work, and household economics, and with at least two possible credits in any of the three branches).

NOTE.—As stated in connection with Table I of this report: The unit referred to here is that adopted by the Carnegie Foundation and is defined as follows: "A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work."

Two hours of drawing, manual training, or laboratory work are generally assumed to be equivalent to one hour of classroom work.

It is of interest to note that the entrance requirements of the following important institutions at present come within all of the seven foregoing recommendations of your committee:

Harvard University (according to the new plan of admission)
University of Chicago
Leland Stanford Junior University
University of Minnesota (with the exception of the fact that four units in English are prescribed)
University of Wisconsin
University of Missouri
University of Michigan (with the exception of the fact that a total of but 3 units in vocational subjects will be accepted as electives)
State University of Iowa
University of Nebraska
Clark College
Ohio University
Reed College

Respectfully submitted,

Committee: A. L. Williston, *Chairman*; Michael W. Murray; William C. A. Hammel; Clarence D. Kingsley; Ednah A. Rich; Helen Louise Johnson; Clifford B. Connelley

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THERE ARE MANY DIFFERENT KINDS OF BOYS AND GIRLS FOR WHOM ARE NEEDED MANY DIFFERENT TYPES OF SCHOOLS

ARTHUR L. WILLISTON, PRINCIPAL OF WENTWORTH INSTITUTE, BOSTON, MASS.

There are many different kinds of boys and girls; and at the outset let us recognize that boys and girls not only differ, but that they differ in many ways. They differ in mind, in character, and in body; they differ in home environment, and in financial resources. Each one of these differences affects the kind of life-work for which they by nature are best fitted, and accordingly affects the training that will serve as the best preparation for such life-work.

We should try to understand these facts better than we do and we should take them into consideration in school training. The physical differences, I am inclined to believe, are much greater than we are in the habit of thinking. There are not only differences of stature, and weight, and muscular strength, but also differences in nervous system, in power of vital organs, and in acuteness and sensitiveness of touch, eye, ear, and taste. Training and directed activity may greatly influence

bodily development, correcting weaknesses or producing exceptional power, just as it is possible to direct the development of mind and character within prescribed limits. But the natural constitutional characteristics still prevail, and should not be overlooked or forgotten.

Home and social environment, too, have a far-reaching influence. The boy brought up in crowded city streets has some advantages over, and perhaps on the whole equal opportunities with, his country cousin, brought up on the farm; but tho all other things are the same, their opportunities cannot be identical; for the outlook and chance to gain life-experience are of very different kinds. And lastly, financial resources greatly affect the likelihood of achievement in many directions. A boy in poor or moderate circumstances, who is forced to go to work at the age of fourteen or fifteen years, may early acquire a sense of responsibility which in certain fields may give him a great advantage over his richer and apparently more favored schoolmate. On the other hand, certain avenues of success are definitely closed to him by the early necessity of going to work.

In American schools in the past, we have been too liable to overlook these differences, and to think that it is possible to average these qualities of human character as we would figures on the blackboard. In consequence, in our practice, we have too often assumed that a course of study could be devised which would fit the mythical average boy and therefore be equally good for all.

In contrast with the outworn doctrine of the average boy, let me repeat a story told me by the superintendent of an important factory of one of our largest industries. This man had charge of the employment and placing of many hundreds of workmen. He told me that he had often discharged men as a matter of discipline, and for many other reasons; but that, in his years of experience, he had never, so far as he could recall, discharged a single man for incompetence. Yet his factory was noteworthy for its high efficiency. He said that he had learned that incompetence in one direction, so long as there was willingness to make effort, invariably meant special ability in some other direction. His constant study, therefore, was to find the kind of work that was suited to the men who appeared to be below the usual ability at the tasks to which they were first set. He observed them closely and moved them about from one kind of work to another, and said that it invariably happened that there was some kind of work in the factory that in the end they were able to do especially well—the kind, of course, for which they were especially fitted. Until that was found, he regarded the failure as his, not theirs.

I think this coincides with the observation of most of us. The misfortune is that both in school and in practical life there is nobody to assign these different tasks to those who appear to be behind their fellows until new work is found for them in which they may do well.

The story nevertheless, has, I believe, a special meaning for us. As schools are at present organized, the only departments in which there is much room for varying tasks and instruction to fit different tastes, abilities, and ambitions of pupils are the drawing, the shop work, and the home economics. In greater degree than teachers of other subjects, we have here opportunity to study boys and girls, to discover their limitations and their special powers, and to give them a chance for individual expression; and because of the unfortunately prescribed conditions of the balance of the curriculum, is not the obligation upon us increased to keep our work flexible and adaptable to individual human needs?

At present our system of education is arranged as a continuous pathway from the lowest grade to the highest without even convenient stopping-places for those who must get off. In consequence many are tumbled off most unceremoniously with absolutely no equipment to help them make the necessary adjustments with practical life.

I like better to think of an ideal system of education as a "symmetrically branching chestnut tree" than as a series of parallel paths. I think of the trunk as embracing those things which are common to all, even to those who must leave school at the earliest age. This trunk continues up straight thru the center for those who would reach the blossoms at the very top; but at every stage, between a point very near the bottom and the top, branches go out in every direction; and each branch reaches out to blossoms as perfect—and not so difficult to reach—as those at the top. In similar fashion, our school system at every stage, from a point very early in the grades to the college, should reach out a helping hand in every direction toward every kind of practical work that is worth while.

This analogy makes simple the relation between general and vocational education. The former is the trunk which supports and nourishes the latter. Both are necessary parts of the equipment of every boy or girl. They are not antagonistic, but supplement one another; not enemies, but friends; one is the stalk, the other the foliage and flower. The general alone is imperfect, and an almost useless thing. It should always be regarded as preparing for, and leading up to, skill, efficiency, and excellence in something, whether it be in plumbing or in preaching.

Now let us apply these principles to our own work. It may be general or it may be vocational. How shall we distinguish? If it is work given to boys or girls who have not yet determined their future occupations, or if it is given to a group who will follow a wide variety of pursuits, then it is general education no matter how technical the teaching may be. This is true whether we are considering shop work in the elementary school or in the technical high school; whether it is mechanical work or fine and applied art; whether it is work for boys or household science and art for girls. It is still general so long as it is not destined to be used in the main as a stepping-stone to some specific vocation.

Let us frankly acknowledge this, and, under the term "manual arts," consider for a moment how we can make it of the most value. Emphasis in each of the seven following directions, I believe, is important:

First: More time is needed in the curriculum than is ordinarily allowed for manual arts; 90 minutes per week, or 120, or 240 is not enough. More than this in many places has been found, and in others it can be found. We must continue our crusade, therefore, for a sufficient allotment of time.

Second: Each thing undertaken should be carried far enough to get proficiency—genuine excellence in it.

Third: All the work should accurately represent professional work—not amateur. When we teach mathematics, we use the standards for addition and multiplication used in business offices. When we teach French, we insist upon the best pronunciation of Paris. Similarly, when we teach manual arts, let us always insist upon the best methods and standards of the profession.

Fourth: All the work should have reality, that is, the tools and equipment and methods should be identical with the commercial; the jobs should be real jobs; each sixty minutes should, so far as possible, be made to produce sixty minutes' worth of production; and always the product produced should have a purpose.

Fifth: The instruction should be made to reveal a true picture of modern industry in the outside world. If a boy is to study history, he should learn true history. If he studies manual arts, even tho he become a merchant, he should obtain an accurate perspective of industry.

Sixth: Too often we have been satisfied with intellectual conceptions—with understanding, merely, how work should be done.

Seventh: The atmosphere of real life should surround the work, giving the sense of responsibility, the spirit of competition, and the necessity for efficiency that industry demands.

Do I hear someone inquire: "Are you not imposing standards for vocational work rather than for general education?" No! Not at all! I am simply imposing the same standards that good Latin and science teachers have been demanding for all time.

We will pass on now to consider the industrial or vocational education and the difference will be plain. If we refer back to the analogy of the chestnut tree, we shall expect the industrial to follow and supplement the general education. We shall expect it to conform to the conditions that make for efficiency in the general; but as it differs radically in its primary purpose and in the direction in which it leads, we shall also expect points of radical difference. In detail these points of difference are many. I shall only touch here upon three—the three that seem to be of special importance:

First: The time devoted to vocational subjects in industrial education is vastly greater than is ever obtained for manual arts in general education, being from perhaps 50 to 80 per cent of the total time in the curriculum instead of at the best perhaps 20 or 30 per cent.

Second: The boys or girls, with very few exceptions, are actually going into the occupations for which the school offers preparation. This difference is fundamental. For example, a school of high-school grade

cannot be a trade school, for boys who go to high school beyond the first year do not enter mechanical trades.

Third: The industrial school has the absolute necessity of making connection with the trades or industry for which it trains. It must actually succeed in landing the boys or girls in the positions they are seeking. A law school that does not succeed in making real lawyers is not a law school; a normal school that does not make teachers is not a normal school; a preparatory school that does not get boys into college is not in fact a preparatory school; and similarly, an industrial school that does not land its boys or girls, in the main, in positions in industry is not an industrial school in every proper sense.

The danger is that schools may be planned that start nowhere in particular, and will reach nowhere in particular. They must always rest on a solid foundation, at the level of the human beings that are ready to be trained. They must lead to some definite getting-off place.

The great variety of important callings and occupations requiring different types of skill and intelligence indicates something of the number of different kinds of school training that there is need for.

In conclusion, let me say that the movement to adapt education to the needs of all types of boys and girls is widespread, and is making rapid progress. Much harm may come if this movement is misunderstood, if the distinction between the general and vocational training is forgotten, or if the attempt is made to compromise between these two, for no such compromise is possible. Much good, untold good, on the other hand, will result when a general system of truly vocational work fully supplements the fine results that are now secured in the scheme for general training.

The members of this department of the National Education Association—we who are teachers of art and manual training—have at the present time both a great opportunity and a great responsibility. We are in a better position than others to see and appreciate the meaning and importance of this movement. Consequently, it becomes our privilege and duty to study and support it, and, in so far as we are able, to guide and direct it wisely.

THE CONTINUATION SCHOOL AND PUBLIC EDUCATION

CARROLL G. PEARSE, SUPERINTENDENT OF SCHOOLS, MILWAUKEE, WIS.

(*Abstract*)

Great numbers of young people, either because it is necessary, or because they think it is necessary, will leave school before they complete the minimum of ordinary education. They leave also without any adequate preparation for the business which they choose.

A part of the people who require the service of a continuation school are young persons under eighteen years of age, who should get not only

more of general education, but who need training to make them better craftsmen or followers of various employments. In addition to this, there will be a great number of persons above eighteen years of age who need to continue some general studies to make them wiser and happier citizens. They need also to get more training in the things that will make them intelligent in their business.

Different kinds of continuation schools will be required. Among these will be the half-time classes in which young people will work one-half of the day and attend school one-half of the day or they will attend school one day, and work the next day, or perhaps they will work for one week and attend school one week. In each of these arrangements the young person will fill one-half of a job; two young people will fill a desk at school continuously and the same two young people will fill out a job.

There will also be evening continuation schools for persons over eighteen years of age; young people below that age should not be permitted to attend school in the evening after they have done a full day's work.

For boys and girls under eighteen years of age, there will also be established classes where they may attend school for one-half day during the week, following some regular employment during the remainder of the time.

The course of studies for these schools will differ according to the needs of the students and the amount of time they can spend in school. The younger pupils must have general studies. They must have those subjects which will make them better citizens. They must also be trained in the business which they have chosen. The older people, most of whom are trained in their business to a reasonable degree, may also wish some help in this direction. They will, however, be interested chiefly to increase their general knowledge and to learn those things which will make them more intelligent citizens.

The "plant" for these schools will be of necessity adapted to the kind of instruction given—equipment for teaching the household arts, for teaching the use of tools, for giving a knowledge of mechanical drawing, for special studies in connection with business employments. All these and many others must be provided to meet the needs of the different classes which will be taught in these schools.

The selection of teachers for continuation schools is of first importance; only the best teachers can be used. People who are in school only a few hours each week must have the best which can be given in the way of equipment and teaching; the time of these young people is precious.

These schools should be organized as a part of the public-school system. The regular school authorities are generally and must universally be interested in this work. It will be a mistake to follow the plans used in some foreign countries where separate boards of administration are provided. Under such a plan there will always be the danger of developing two independent and competing public-school systems.

Sound principles of administration require that the committees or boards having charge of these schools should have control of their funds; that the executive officers should receive general direction from their boards, but should have the responsibility for the professional administration of these schools placed fully in their hands; schools should at all times be administered so as to meet the needs of those who attend the classes and bring to their students the greatest good in the direction in which the latter most need help.

REPORT OF THE COMMITTEE ON VOCATIONAL EDUCATION AND VOCATIONAL GUIDANCE

One of the most insistent present-day demands of the public is that the work in the field of education shall be efficient. The measure of efficiency is found in the ability or lack of ability to cope successfully with the problems which arise in a higher school, in a particular occupation, or in the ordinary routine of life. This measure is applied ruthlessly to all types of education. The wonder is that the difference between the standard and the result is no greater than that expressed by the critics of our public-school system.

This whole question is one which deeply concerns society and its progress. Any attempt to settle it without a consideration of society in a large sense can result only in a temporary compromise and partial failure. This has been fully demonstrated in the so-called cultural education which in actual practice has resulted in training for the professions and kindred occupations thru a long process of elimination of the so-called "unfit." It is also illustrated in the case of the manual-training schools which were still general in their aims and methods, and did not enable the individual to get at the specific task which was to make him an efficient citizen. It is again illustrated in the technical schools, which at best can provide only for the select few who either wish to enter the polytechnic schools or wish a shorter route to a position as draughtsman or to the machinist's trade. Each of these methods of solution held sway until the people themselves realized that no one of these plans offered the correct solution of the problems of society.

On every hand now comes the renewed determination to arrive at a more permanent solution of many of the questions involved. The manufacturers' associations, the social and philanthropic workers, the labor unions, those interested in education, the people themselves are all striving to discover the means which shall bring about the desired result. To be sure, each of the above agencies may be seeking to promote the best interests from a somewhat narrowly biased standpoint. Nevertheless, the pertinent fact is that all are endeavoring to reach a conclusion which may be placed before the world as one of the methods thru which better things may be evolved not alone for the individual but for society as a whole. This whole movement has resulted in a new demand upon the public schools.

Up to the present time the public schools have met fairly the problem of preparation for the higher schools, with more or less criticism from these higher schools. Also to a good degree they have furnished the young citizens with the tools for the ordinary life-routine, notwithstanding the adverse criticism of adults. That is to say, for the most part the public-school pupils know a sufficient amount of English, mathematics, etc., to enable them to carry on any ordinary occupation. It is only within the last quarter of a century, however, and more particularly within the last decade that specific progress has been made toward equipping the student for direct contact with life in the business and industrial world—to make him or her fit a particular occupation. The report of this committee upon vocational education is concerned chiefly with this specific problem.

This committee believes that the fundamental thought underlying this movement, whether it be a movement of educators, manufacturers, workers, or philanthropists, is the closer relation between theory and practice in educational work. This committee believes also that as the attempt is honestly made to relate these two of necessity there will arise a modification of theory to meet the empiric conditions found in practice. Thus, at the outset, the committee is open to the possibilities of a philosophy which shall carry it beyond the field of education for culture to the field of education for accomplishment. In other words, the general mind-training idea may be superseded by the idea of training the mind for specific and related ends.

WORK ACCOMPLISHED

In determining the line of work to be carried on by this committee, a preliminary outline was prepared. This preliminary outline was submitted to the several members of the committee for revision. From the responses received it was readily ascertained that the breadth of the program made it impossible to finish the work this year. For this reason, it was determined by the committee to prepare a preliminary and a final report.

One meeting of this committee was held in Cooper Union, New York City, May 26, 1913. While not all members of the committee were present, previous correspondence and conference, in addition to this meeting, resulted in the adoption of the following as a basis for the preliminary and final report.

The preliminary report is to contain: a general introduction; a suggestion of the field which might be covered in the final report of the committee; a series of questions and issues which might be discussed in the final report; an outline indicating the scope or possibilities of the work involved in any comprehensive study of the questions of vocational education for persons between the ages of fourteen and eighteen years.

In the final report, it is proposed: that the report shall take the form of a handbook of information for the use of those who are interested in adopting some plan of vocational education and vocational guidance; that

this report shall contain also a discussion and presentation of plans for certification and training of teachers for vocational education; that it shall include an acceptance of principles and policies, already prepared, upon vocational education and vocational guidance, together with additional principles and policies in case such need arises; that it shall add warnings, as well as suggestions, concerning what needs to be done and what needs to be avoided to make the work successful in any given community.

One phase of the work of this committee includes a report upon the question of vocational guidance. At the suggestion of the President of the Association, it was finally decided to assign this work to a subcommittee, with the chairman of the general committee acting as chairman of the subcommittee, this subcommittee to make a report to the general committee to be reviewed by it and to become a part of the report to the Association. As a result of this decision, the following were named as members of this subcommittee:

Meyer Bloomfield, secretary of Vocational Bureau, Boston, Mass., vice-chairman.
Alice P. Barrows, director of Vocational Education Survey, New York City, N.Y.
M. Edith Campbell, director of Schmidlap Bureau for Women and Girls, Cincinnati, Ohio.
Jesse B. Davis, principal, Central High School, Grand Rapids, Mich.
James S. Hiatt, secretary, Public Education Association, Philadelphia, Pa.

This subcommittee has held one meeting, mapping out the line of work which it will undertake for the report of 1914.

Like all great educational movements in the past fifty years, the movement is sure to modify, if not be introduced actually into, the work of both the elementary and the secondary schools of the country. The importance of the report upon this question is indicated by the 2,000,000 young persons concerning whose welfare such a report must take cognizance. The educational interests of the country can ill afford to have private interests take up and carry forward work of such large importance as is the work of providing helpful, efficient instruction for young men and young women between the ages of fourteen and eighteen years.

In its broadest sense, vocational education may deal, not only with the former professional schools, trade schools, and schools of technology, but with the more recent development of industrial schools. The far-reaching influence indicated in such a movement cannot fail to impress all with the seriousness of undertaking to report upon the topic. As will also be seen by the outline, it will become necessary for investigations to be made, questions to be submitted and returned, and the services of experts and stenographers to be placed at the disposal of the committee from time to time. It is therefore the recommendation of this committee that this Association grant an appropriation sufficiently large to carry on the work of this committee.

The question of the need for vocational education has been too well established to require extended consideration in this report. Nevertheless,

there are certain factors which increasingly tend toward the strengthening of the demand for a form of education which shall give more than a general training; that is to say, an education which shall directly benefit a larger number of the school population in the occupation in which they may be called upon to engage. While these factors are variously related and have their foundation in society, they may be separated into three distinct fields: first, those which are of economic significance; second, those which are more distinctly social; third, those which we may term educational.

This committee believes, therefore, that vocational education is justified from the economic standpoint for the following reasons:

First: Whether or not we are willing to admit it, it is nevertheless true that the natural resources of this country are becoming exhausted. For this reason, there is need of more concentrated effort to assist in the conservation of these natural resources.

Second: Whether in the home or at work, there are certain factors which need greater thought and training upon the part of the individual in order to make a more economic use of these factors.

Third: At the present time there are many persons entering various fields of labor without due emphasis upon the training. There is also a great tendency toward an increase in population. So long as such a tendency to increase shall continue, by just so much will the hazard of dissipated effort hinder the progress of the country.

Fourth: It is a well-known fact that the general standards of living are higher in this country than in any of the European countries. In order to maintain this higher standard of living, it is necessary that the workers in this country shall receive as much training as possible. Thus would it become possible for each individual to be more productive.

Fifth: Higher standards of living mean greater percentage of luxuries. These luxuries ofttimes include improved workmanship. To meet then these newer demands a higher class of workmanship will be invoked.

Sixth: Whether we realize it or not, this nation to maintain itself against the foreign powers in commercial pursuits will need to utilize her own resources as far as possible. In order to do this, vocational education will be necessary.

Seventh: Vocational education will reduce the number of unemployed, because:

1. It will be possible to raise those already employed to a higher level of skill, thus making them able to do better work than formerly. This will give an opportunity for the unemployed to enter as somewhat skilled employees.

2. Many persons are not employed because of their inability to perform any special task. They have a lack of knowledge. Vocational education will tend to decrease the number of these persons.

3. Vocational education and vocational guidance will tend to adjust the individual in the formative period of his life to the work for which he is best adapted.

Eighth: Another economic reason for the introduction of vocational education is to prevent the potential possibilities from going to waste. In many cases the value of a laborer is in direct proportion to his opportunity to express himself.

Although vocational education would be fully justified by society for the several reasons previously enumerated upon the economic side, nevertheless it can also find as complete justification upon the social side. The carrying forward of any plan of vocational education which has for its ultimate purpose the efficiency of the individual will surely result in large benefits to society as a whole.

Among the many reasons for such justification, the following are mentioned as peculiarly adapted to this discussion:

First: By making it possible for the semi-skilled worker to take his place in a higher occupation, thereby permitting the employment of more workers from the field below, it will be possible to reduce the number of "ne'er do wells" and socially inefficient citizens, who have up to this time had no chance to show their capacity for a better job.

Second: By utilizing the energy of these individuals it will become possible to reduce the amount of crime in a large measure. This, in turn, will tend to lessen the necessity for penal institutions.

Third: There are certain social assets inherent in the individual the improvement of which may be conditioned upon the proper training of the individual.

Fourth: With proper vocational education, the individual worker will be able to prove to this employer his actual worth. The employer will of necessity recognize this worth by the payment of an equitable wage. In most cases this will tend to a solution of the problems for which the minimum wage idea has arisen.

Fifth: An added advantage to be derived by society from the introduction of vocational education will be the reduction of the social evil due in many cases to ill adjustment of the individual to his work, to his unemployment, to his retardation in school and in life, and to improper home training.

Sixth: The tendency of vocational education will be to bring about a co-operation between labor and capital in such a way that they may unite in some plan for the maintenance of the craft.

Seventh: Only thru training will the efficiency of the individual in any task become increased. Such efficiency will inevitably result in the maintenance of a suitable standard of living.

Eighth: Not the least of the reasons for vocational education on the social side is the necessity for the preservation of the national welfare by a continuance of our commercial prosperity, and this can be safeguarded only by a practical, vocational education.

While the social and economic aspects of vocational education somewhat overlap each other, and while each series of facts would be sufficient in themselves to justify the establishment of vocational education, there is still another side of the question which to educators may seem somewhat more important. Our question must be: To what extent can vocational education be justified from the educational side?

It will be agreed by practically every serious-minded school man or woman that any education which shall extend its courses to meet the needs of those for whom provision has not been made will find a sufficient ground for its existence. It is well known that for the individual who of necessity must take up life's burden at a tender age our present education does not provide.

First: Vocational education aims to reach just this class of individuals, hence, the justification for vocational education from the standpoint of an educator is the extending of education to reach groups hitherto neglected.

Second: It has been impossible up to the present time to give those pupils a sufficient general education to satisfy the needs of a higher citizenship. For this reason any work which will take the boy or girl beyond the period of the grammar school and continue his education until he or she shall have reached the age of eighteen years will find ample justification in the extending of the general education of the individual.

Third: Soon after the introduction of the kindergarten in the schools of the country, there were noted somewhat radical changes in the thinking and attitude of those engaged in educational work toward the pupils under their control. In fact, it is not too much to say that not one of the educational movements within the past fifty or one hundred years has failed to leave its stamp upon the educational systems of the country. In most cases have the public schools gathered from these movements those things which were worth while and adapted to the conditions, and allowed the other matters to take their natural course. If we base our conclusions upon such conditions, it is certain that another educational advantage to be derived from vocational education will be the improvement and change which is bound to result in the methods of general education.

Fourth: Until within a very few years it has been the established custom of the public school to provide a higher education for only a select few who by chance were able to pass regularly thru the grades or who received a standard ranking upon certain examinations. This whole plan was in reality a process of selection by the elimination of the so-called "unfit." Thru vocational education it will be possible to make the selection of these individuals thru a process of training rather than thru a process of elimination.

Fifth: Most persons will agree that in every human being there is a certain amount of stored energy in some form or other. This energy is capable of almost infinite growth, provided it is once discovered and made use of, and provided also that other forces do not come in to thwart its growth. Vocational education, by opening up different and various opportunities for the expression of this what we may term potential power, or potential energy, will bring about a broader development of the individual.

Sixth: It requires no argument to establish the fact that there are certain persons attempting to receive the advantage of an education who cannot do this abstractly. It must be done in terms of the concrete. Hence, another educational reason for the establishment of vocational education is that it enables the pupil to learn to do by doing.

Seventh: Not longer ago than a quarter of a century did the idea of interests gain its first foothold in educational activities. Since that time it has come to be widely regarded as somewhat fundamental to the whole process of learning. Interests have been variously classified as immediate and remote, as those which add directly to the student's power in solving a difficult problem, or as those which he may use at a future period. Most writers are agreed that the interests which serve best our educational purposes are those which need not be postponed too far into the future. Vocational education is therefore more nearly in accord with this idea of interests than is any other form of education. It is in this field that the pupil is enabled to see the end almost from the beginning. This furnishes us with a seventh educational reason for the establishment of some form of vocational education.

QUESTIONS AND ISSUES FOR FINAL REPORT

As the question of vocational education is somewhat recent in its development, naturally there arise almost innumerable series of topics which should be discussed by those interested in educational work in whatever field. This committee has determined to place some of these questions before this Association. It is proposed that these questions, as well as similar questions, be considered in the final report of the committee to the Association.

1. What is vocational education? Should this Association use the definitions already established concerning vocational education and related topics?

2. What relation does vocational education bear to elementary education?

3. What relation does vocational education bear to general education as found in the high school?

4. What is the relation of vocational education to technical education and the mechanic arts in the high school?

5. What different kinds or classes of vocational education may be said to exist? These are to be defined and careful illustrations of each are to be given.

6. Define and show the relation between vocational education and manual training.

7. What is included in the term "pre-vocational education" and what is its relation to vocational education?

8. What is the relation of vocational education to the practical arts?

9. Why are certain forms of education, as professional education, vocational?

10. What are examples of and varieties of commercial education, that is to say, the short commercial course, the extended commercial course, correspondence courses, etc.?

11. What are the examples and varieties of agricultural education with illustrations?

12. What is the difference between academic agricultural education and vocational agricultural education?

13. Is instruction designed for the duties of the home vocational?

14. What are good examples of vocational schools?

15. How should the field of vocational education be limited? That is to say, for this report shall it be made to include professional schools, nautical schools, and the like?

16. What varieties of vocational education have come under public control and support, with illustrations of each?

17. Which of these fields of vocational education are likely to be discussed in the handbook which is to be prepared by this committee? Shall it include vocational education, preparation for household duties, preparation for the various trades, and be limited only to such fields?

18. What are the reasons for eliminating the other fields or types of vocational education?

19. What are the different varieties of vocational commercial education that now exist, with illustrations?

20. In considering commercial courses, what should be excluded as non-commercial?

21. What are the different types or varieties of vocational agricultural education, with illustrations?

22. What other types of agricultural education are now regarded as vocational by this handbook?

23. What are the types of household arts education which may be considered, with illustrations?

24. What are the non-vocational household arts courses or schools?

25. What are the types of vocational education that have proven feasible? Among these which are to be considered by this committee there are all-day schools, part-time schools, and evening schools.

26. What types of all-day industrial or vocational schools are feasible: (*a*) on the basis of the industry served; (*b*) on the basis of sex; (*c*) on the basis of the extent to which they actually prepare for the industry?

(1) Character of school in determining its relation to the industry.

(2) Character of industry, as carpentry, millinery, etc.

27. What are types of part-time education that are feasible? These may be half-time plans or less than half time. These types will be classified: (*a*) on the basis of the time given to the school; (*b*) on the basis of the responsibility of the school; (*c*) as to the supplementary character of the school; (*d*) on the basis of the industry served.

28. What are types of evening schools that are feasible, with illustrations? The following classification of evening schools will be considered: (*a*) the general course and short unit courses, with illustrations; (*b*) evening schools for given industries; (*c*) vocational supplementary to the industry served and vocational non-supplementary to the industry served.

29. What are the types of vocational all-day schools still in the experimental stage?

30. To what extent should the National Education Association assist in the work of vocational education?

31. Should some of that work consist in criticisms and suggestions bearing upon the work proposed or already established? If so, how may such criticisms and suggestions be made operative?

32. How, and thru what agencies, should the public-school system assume and best discharge its responsibility to pupils, parents, and the public? Will such a program include vocational education?

33. Should this Association thru this committee attempt to determine anew what constitutes the essentials of a common education?

34. According to pupils the full benefit of nature's laws regarding bodily rest, what hours of the remaining twenty-four should be devoted to obtaining vocational or academic education?

Should this time be spent in day continuation schools or evening schools?

After due consideration of the extent of this work, your committee wish it distinctly understood that this report for the year 1913 must be regarded as merely a preliminary statement. The purpose of this is to outline a possible report upon vocational education that might be made in another year by this or another committee.

The committee desire to state their conviction that the final report suggested in this preliminary statement is of a character that would require more than volunteer service in preparation. The members of this committee, therefore, while recommending that such report be prepared, feel themselves willing, if the National Education Association should so desire, to continue as members of the committee for that purpose only on the condition that the National Education Association equip it with adequate funds to do the work properly.

The presentation of the final report should be delayed until such time as it can be done in a highly satisfactory manner.

Respectfully submitted,

Committee

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ART AND AMERICAN LIFE

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The phenomenon which we call art did not spring, as did Aristotle's polliwog, alive and wriggling from the dead mud. It did not arise out of nothingness—it was not even created over night. Its beginnings are crude indeed. From the first rough sketch on the caveman's wall to Michelangelo's Sistine Chapel, from the first rude implement to Cellini's coffer, progress has been retarded and slow. Slowly traditions were formed, and slowly grew. Bit by bit the patient decades advanced and bore with them problems met and overcome, as glaciers inevitably bear the stupid bowlders which impede their progress. This is the curve of art which, for any country, any engineer can trace: its beginnings in borrowed tradition, its gradual rise, the grip of its roots in native soil, its independent growth, and, finally, the fine flower of its perfection when its great men blossom forth.

America was no exception to this rule. It was peopled by pious, introspective Quakers, by Puritans who held that the studio was the devil's workshop, by Virginian cavaliers busied with agriculture, by Dutch burgers too occupied in clearing forests and in gathering pelts to remember their artistic heritage. The country was new, and, as in all new countries, the need was great for pathfinder and for pioneer; æsthetic cravings waited on the instant demands of industry and commerce. The Indians possessed, indeed, some small store of artistic traditions, and these, if they had been appreciated by the colonists, might have formed the foundation for a veritable native art. We are told that captive Greece made captive her rude conqueror, but our forefathers too heartily despised the defeated Redskin to give serious consideration to his childish representations or to his interesting crafts. Then came a short space when the country paused for a deep breath, and one or two timid spirits, who had felt the call, ventured forth. By this time England was dominant in the New World, so that West and Copley and Stuart were drawn to London, and absorbed and handed down the traditions of the great English portrait painters. These were the men who blithely faced the unknown. They broke the virgin soil, they fought poverty and ignorance and lack of appreciation. There were giants in those days. Many, among them the best minds of the time, were forced by stress of circumstance into other professions. Robert Fulton turned aside from painting and invented steamboats and submarines. When Samuel Morse installed his telegraphic instruments in the basement of the Capitol at Washington he found there the torso of his Hercules, for which years before in London he had been awarded a medal of gold.

Then followed the Landscapists, the group known as the Hudson River School, without traditions, without technique, influenced individually by

Dusseldorf and by Constable and by Claude Lorrain. They were, as a whole, ignorant of what had gone before. They faced nature with reverence in their hearts, like so many worshipful cameras, and transcribed her literally, photographically, with all her accidents, with all her unruly imperfections. All honor to Durand and Cole and Kensett, and to the men whom they made possible, Inness and Wyant and Homer Martin! They who were first to show a national spirit, to look at America thru American eyes, are, from our standpoint, worthy of all praise.

After the Hudson River School came the Munich influence, and Chase and Duveneck returned to pass on the traditions of direct brushwork and sound drawing. Already the American art student, who went abroad, was selective, and the work of these men shows more the influence of Rembrandt and Velasquez and Hals than of their Munich teachers. This characteristic ability to absorb the best, to keep true to individual and American ideals, has lasted thru the legacy of the Barbizon men, thru Turner, thru the Impressionists, down to our own time.

Today from the technical standpoint all art is cosmopolitan. A certain advance is made in one direction or another and it at once becomes common property. Whistler rediscovers Velasquez, and one-focus painting becomes the rule instead of the exception. Chevreul and Rood suggest to Monet that it may be possible to divide a color passage into its elements, and as a result we have the Luminists, the Divisionists, the Pointillists, the broad and square patches of the Munich Secessionists; the embroidered streaks of Segantini and his followers, and our own superb craftsmen Tarbell and Dewing subtly inlaying the precious mosaic and matching touch against touch with such accurate color values that the eye is not sensitive to the division edges, but only to the resultant glow of color.

It would be interesting to trace the technical parentage of an American artist of today as we trace in an Old World picture gallery the features —now nose, now eye, now mouth—possessed in common by some noble family; but this would require more time than we can well afford.

Take the Japanese influence alone in its various manifestations. We can see it in the landscapes of Dearth, Lie, and Eaton, in the decorations of Blum and Robert Reid; in the illustrations by Falls, Bull, and John Scott Williams; in Dodge MacKnight's water colors, in the design and crafts teaching of our schools. Hokusai is apparent in Whistler's "Battersea Bridge," Utamaro in "Rosa Corder," all the Ukiyoye School in Pennell's etchings, Sesshu in Homer's "Fox Hunt." This influence, like the Impressionist influence, has been healthy. Just as, on the one hand, we advanced in the direction of purer color and light, so here we have acquired *notan*—the charm of flat masses of color, the ability to tie together, in new and interesting ways, the various elements of the canvas.

Just now we are having some new words added to our vocabulary: Post-Impressionist, Cubist, Futurist, and some worthy gentlemen are

greatly agitated—just as Ruskin was agitated by Whistler's "Falling Rocket," just as the French Romantic School agitated the Classicists. Our overwrought friends can see nothing here but a four-dimensioned perversion of nature, a sort of union of pre-Adamite ideals and fricasseed geometry. It may be true, as William Henry Curtis says, that we are all offended by novelty, but this idea of synthesis is not new. Inness and Twachtman had it, and joined to it beautiful color and a sense of form. The work of Matisse and Gauguin, for instance, need give no shock to teachers of drawing in the lower grades. Nature seen thru a temperament, a naïve outlook on life, and the possession of an X-ray eye can be found, not only among the Post-Impressionists, but way down in the room where they sing: "Good Morning Little Stranger, Good Morning to You!" So we need scarcely think this movement, as some would have us, the fearsome bogie, the studio-born terror which stalks with menacing tread thru the fair field of art. Many of these men are sincere and worthy, much of their work holds promise of development. Furthermore, our painters are too well balanced, too sane to be led away by false gods. We have been accused of lack of passion by Latin critics and we admit the charge. Indeed, it is just this lack that is our saving grace. Our emotion is no less real because it is restrained. This elemental conservatism has not only saved us from extravagance, but it has, in combination with some mysterious alchemy, helped us in the inexplicable processes of selection and amalgamation which are the keynote of our national life and art. Just as the children of the third generation whose ancestors are foreign born show in our country scarcely a trace of their origin or nationality, just as skull-structure and facial angle change toward the virile, nervous American type, just so the various artistic elements, English and French, German and Italian, have been fused into something that is coherent, that is marked by well-defined traits. These definitive characteristics persist in spite of the comparatively vast geographical area of our country, and the incredible number of influences, local and extra-national, tending to prevent uniformity.

A certain spiritual quality is common to all great art, not only in such obvious creations as Rembrandt's "Supper at Emmaus" and the Venus of Melos, but in Vermeer's interiors, and in Whistler's nocturnes. It is as apparent in "Two Copper Pots and an Onion" by Chardin as in "The Little Girl Saying Grace" in the Louvre; it is more apparent in Millet's "Feeding the Birds" than in "The Angelus." This reverent attitude toward nature, this intangible spiritual infiltration, is a dominant characteristic of American art. It breathes thru the Adirondack vistas of Wyant, it is felt in the great sounding fugues of Homer's marines, in the calm strength of Thayer's virgins, in the sculpture of St. Gaudens, Adams, and French. Allied to this spiritual element, there is a strain of the subtlest poetry threading thru all our painting. Go to any exhibition and you will find canvases that

bring to you the hush of the still forest, the silent majesty of the desert, the silver glint of the brook behind the rustling birches, the glow of the golden pool as the sun, poised above the tree tops, falters for a moment. We have, again, a great group echoing—sometimes protesting against—American conditions; preachers in paint, unconscious of pulpit, bent on uncompromising realism—reflecting the hopes and fears, the suffering and the joy of our time, and thus doubly effective. No gray printed words, no vivid oratory, can deal the sledge-hammer blows for social reform that come from the canvases of Glackens and Sloan, Bellows and Jerome Myers.

This art of ours, so varied in its manifestations, can be defined only by antithesis. Compared with its strength, English art is saccharine and pretty; measured with its spirituality, French art is chic and soulless; seen beside its energy and virility, Italian art seems lifeless and dead; in contradistinction to its optimism, German art is dyspeptic and metaphysical.

I crossed yesterday a part of what in my childhood the geography called the "Great American Desert," and I noticed for the first time a curious plant. I asked the conductor about it. "Sure," he said, "that's the tumble-weed. She grows up there in the sand and alkali, and when it gets too dry for her she pulls up stakes, root, seeds, flowers, and all, and she hunches herself into a ball and goes bumping around looking for a wet spot." This seemed to me to parallel, in remarkable detail, the progress of American art. Like the tumble-weed, our painters in the past, lacking inspiration and sustenance at home, were compelled to wander abroad. Thus they strayed, blown about gathering experience—and bumps; learning how to tumble—and alight—so that by the time the American oasis held forth promise of nutrition, the tumble-weed was ready, a sturdy independent plant, ready for growth, eager to expand. Today there is more irrigated land. The desert is being reclaimed and the pioneers in the reclamation service are the self-sacrificing, devoted, and underpaid supervisors and teachers of the manual arts.

The artist builds on the past and he is recruited from his fellows, the great body of artisans and craftsmen. Whistler's statement that there never was an artistic period, that an artistic nation never existed, is, of course, untrue. A nation of men who have, themselves, tried to create is needed to appreciate, to further, to make possible the occasional master. Greece and Japan and mediæval Europe had this background and every culminating period of art possessed it. In our country we have until recently lacked this essential element. This age of industry and the machine has starved out the handworker; we have not yet learned how to make beautiful things with machines, and we have not yet learned to feed the craftsman who fights against the machine. The solution of these problems lies primarily with you, thru your insistence in your classes in applied design that machine-made things are not necessarily bad, that the cheap

need not be ugly. That the craftsman starves today because people do not pay him enough for his wares is self-evident, and I feel that in this direction, that of educating an appreciative public, a public which will pay for what it knows to be good, you have already accomplished much. But you need to do more. You must play your part, and that is a most important one, in the great movements leading toward civic and social betterment. The old order changes. "New lamps for old!" is everywhere the cry. The little red schoolhouse has passed away and with its passing has come the whir of the Jacquard loom, the rumble of the automobile, overhead the hum of the aeroplane, and underfoot the roar and clatter of a complex industrial system. Men no longer spread over the fertile fields and live near the good brown earth. They hive in cities; they huddle in teeming tenements; they breathe dust and smoke and cotton lint and jute fiber, their food sometimes refuse, their clothing shoddy.

What can we expect of a people who must lie flat on their backs to see the blue sky? What of a people whose capacity for the appreciation of beauty has atrophied? Let the London Hooligan, the Parisian Apache, the gun-man and gangster of New York's East Side make answer. We are beginning to understand the interlocking of cause and effect; we are learning why Corot and Chopin could not have come from slums, we are beginning to feel that the halt, the blind, and the insane are not halt, and blind, and insane wholly thru unworthy parentage, but thru environment as well; we are beginning to ponder with William Morris the discrepancy that exists between the fields where the beasts live and the streets where men live. The state, indeed, has suddenly come to the conclusion that it would be a good thing to eliminate the elements which make asylums and almshouses necessary. We are moving toward a great era of civic reform, and civic reform means civic beauty. But reform is slow. We must begin with the children; we must center their education around the manual arts; we must surround them with beauty and, in the last analysis, we must consider the individual child.

The most potent influence upon American life and art has been that of the great international expositions. Here our people have received their visual education. Standards of beauty and efficiency have been set before them and they have been quick to absorb and learn. In these great clearing-houses for thought, in these great laboratories where the fine gold is smelted and the slag refused, in these great granaries where the ephemeral chaff is winnowed, American art has been tested and proved.

The Philadelphia Centennial showed American artists their technical weaknesses, but it also gave them better technical methods and a mighty stimulus. Here, too, the great school of American illustration had its start, and all that we know under the general term of manual training had its beginnings. At the Chicago World's Fair our teachers saw for the first time the Swedish Sloyd system, our painters the canvases of the

Impressionist School and native mural painting; our architects a Great White City—wonderful as the Mystic City of Astolot.

The Louisiana Purchase Exposition was more intimate. Here were realized the harmonies of interior decoration, the meaning of the words "applied design" and "handicraft." We understood then what William Morris stood for in England, what Arthur Dow was teaching in our own country. American painting and American sculpture had advanced by leaps and bounds and such continental critics as Dr. Bode of the Berlin Museum even gave to it the first place.

Ten years have passed and great influences have been at work. The American Federation of Arts has sprung into existence; state and national art commissions have been appointed; state and municipal civic societies have been formed; museums by the score have grown up all over the country; Mr. Freer and Mr. Evans have made a national art gallery possible, and the duty on works of art has been, in part, removed. The owner of masterpieces no longer hoards his canvases for his own miserly pleasure. Elbert Hubbard says that the picture-owner who builds a barbed-wire fence about his collection does not shut the public out, he merely shuts himself in; and this new attitude is gradually being adopted, the selfish joy of ownership is merged in the ideal of service. Two years ago, I had the very great pleasure of planning the preliminary loan collection for the Fine Arts Department of the Panama-Pacific International Exposition, visiting the museums and private galleries and asking for loans of exceptional canvases. At St. Louis, after three years' work the Fine Arts Department secured an available group of about six hundred and fifty canvases from which to make selection. In one summer, I was so fortunate as to have promised to us no less than one thousand canvases. Please do not think that I claim credit for this. The attitude of the picture-owners has changed, they are not only willing but eager to take part in this great educational campaign.

The Fine Arts Department of the Panama-Pacific International Exposition hopes to take an attitude toward the public and the arts that will be more than merely passive. We do not feel that our work is over when the canvases are hung, the sculpture installed. We are hoping that we may show a close connection between our work and your work and in doing this be of real service to the cause of art education in America.

THE SCHOOLS AS ART CENTERS

THOMAS A. MOTT, SUPERINTENDENT OF SCHOOLS, RICHMOND, IND.

Schools are becoming more and more the social centers of the community life, and this fact doubles the importance of the work of beautifying the schools and creating within them conditions that will exalt the æsthetic and ethical life of the people. In hundreds of schools splendid work is

being done in school decoration, in courses in drawing, and in arts and crafts, and also by art associations in placing works of art in the schoolrooms. Perhaps the hope of a truly American art, "for the people and by the people," is more likely to be found in the art movements of small towns than in the most exclusive art clubs of large cities. This hope is not without promise of fulfilment in many places little known, where the art work is native, natural, and expressive of the life of the people. Especially interesting are the art associations of some of the small communities where it seems more possible to reach all the people and awaken a common desire for art. Ideals of beauty held in common, a common knowledge of the principles of artistic expression, a common wonder and joy and appreciation for a new production in art—these are necessary to that art atmosphere so essential to the development of a national art.

Wherever people want more beauty in their public life, and are trying to do something, at first hand, to bring the pleasure of art to all the people of their community, in and thru the public schools, the story of the art association of Richmond, Ind., will be interesting and helpful.

In 1897 the art department of the schools, in co-operation with three or four artists of the city, and a few interested citizens, conducted in a centrally located school an exhibit of school art work, of the work by local artists, and a collection of paintings loaned from a few of the best homes in the city. Much real interest was taken by the city in this exhibit. At its close, at a meeting of teachers and citizens, the Richmond Art Association was formed.

This association is sixteen years old. A few citizens started it, and a few have been its vital force; but the number has grown steadily. In its first organization this association brought together all the forces in the town that could be helpful in maintaining a public art movement. These forces have held together and have been so successful in arousing a community interest in beauty and art that this has become an inspiration to other towns. The association is now an incorporated body, and is acquiring by purchase and donation a permanent collection of works of art, all of which are kept in the schools.

The membership of this association represents between three and four hundred of our citizens. Their annual exhibits have contained, besides a display of the art work of the schools, a large collection of the best painting of both local and foreign artists, and valuable exhibits in many departments of arts and crafts.

The expenses of the association have always been borne by its members and its exhibits have been free to the children of the school and all the people. The work of the association has been purely educational. Not only has it given a steady support and strong impulse to the art work in the schools, but it has built up a true and lasting art sentiment thruout the city.

For fourteen years the exhibits were all held in our Garfield School, centrally located and adequately lighted. The use of this building, with

ample lighting for the evenings, has been given free of charge to the art association by a school board which believes in the educational value of art exhibits, and in the school as the educational center of a community. For ten years the common council of the town deemed the art exhibit of sufficient civic importance to justify the appropriation from the town treasury of $100 annually for the exhibition expense fund. This is a significant and hopeful example for those who believe that the people ought to have public beauty at public expense.

All the children of the public schools visit these annual exhibits with their teachers, as do the children and teachers of three large parochial schools of the town. To make the exhibit better understood by the children, explanatory talks are given to them in several of the rooms. This association has been able to work out its ideals with a freedom from traditions and conventions that many art clubs could not know. Before the Western Art Association sent out arts and crafts with its exhibition of paintings, and before Mr. Ives, chief of the art department of the World's Fair at St. Louis, declared that "there should be made no distinction between what has been commonly considered as 'fine art' and that which has been termed 'industrial art,'" the Richmond Art Association displayed, along with the oils and water colors, exhibits of textiles, ceramics, leather work, bookbinding, basketry, cabinet work, etc.

The association has been greatly assisted in securing the work of the best artists by having the Daniel G. Reed purchase fund, an annual fund of $500, given by a former Richmond man, to be used for the purchase of pictures exhibited in the annual exhibitions, the pictures to become the property of the association and to be kept as a part of its permanent collection in the school.

We sometimes call the art exhibit our most beautiful public charity. It is gratifying to find how many people want to help a cause that is for the benefit of everyone in the community. Our florists send plants and cut flowers to beautify the building, a piano company of the town each year during the exhibition gives a complimentary concert to the association, the city band and orchestra play without charge when invited to do so, and our daily papers always give us any amount of courteous and helpful publicity.

Four years ago, when the city erected a new high-school building at a cost of one-quarter of a million dollars, a beautiful art gallery was built on the second floor. This gallery consists of three large rooms lighted from the ceiling. They are provided with properly arranged electric lighting for evenings, and with space for hanging from one to two hundred paintings. This gallery is connected with the regular art classrooms of the school, and students have access to the same when they desire it. The management of this gallery is in the hands of the directors of the art association, and all exhibits are under their direction. The gallery is open to

the public at all times during school hours, and evenings and Sunday afternoons during special exhibits. The permanent art collection owned by the association, consisting now of thirty beautiful paintings, hangs in the gallery at all times.

During the last year six special exhibits have been hung in the gallery for a month each and the visitors to these exhibits numbered over eleven thousand.

The close association of the public schools with the exhibits has given opportunity for better schoolroom decoration. Each of the schools of the city during the past sixteen years has taken great interest in securing a collection of pictures for purposes of study and decoration. The ten school buildings of Richmond now own over one hundred canvases in oil or water color, and over five hundred beautiful reproductions of masterpieces.

It is difficult to estimate the educational influence of these exhibitions. One noticeable result is the progress Richmond painters have made in their work. It cannot be said that these artists are without honor in their own town. Their work always hangs in the exhibition, and the citizens take a genuine interest in it. This opportunity for exhibiting their own pictures and for studying the work of other artists has been the inspiration of their progress during the past sixteen years. In such native development among groups of artists elsewhere thruout our country, in a similar appreciative atmosphere, lies the beginning of hope for a truly American art.

Thru the exhibitions our people have become acquainted with American painters and craftsmen. The standard of taste in the city has been elevated; and at least we have been set thinking about things beautiful. The works of art brought to our city furnish to our people a high kind of pleasure which otherwise would be left out of their lives.

At the close of this paper, fifty stereopticon views were shown, illustrating schoolroom decoration and use of school buildings for art exhibits, together with views of the art gallery and art collection of the Richmond Art Association.

THE RELATION BETWEEN THE HOME AND ART INSTRUCTION IN THE ELEMENTARY SCHOOLS

MAY GEARHART, SUPERVISOR OF ART, PUBLIC SCHOOLS, LOS ANGELES, CAL.

This subject is open to various interpretations. Do we mean the present home of the child, or the home of the next generation made fine and beautiful because education has stimulated a desire for better things? Do we wish to discuss the influence of the school on the home or is the question "What does the home offer to the school?" Undoubtedly the school should lead, and yet the home, providing as it does the most important ingredient of the whole affair, the children, is a factor of no mean importance. The school should be tolerant enough to encourage the child to bring his interests within its doors and in every way to promote a strong interaction with his

home. We are told that art in order to be successful must savor of the soil. This is a fundamental principle that applies to painting, to architecture, and to the art of the first-grade child.

May I tell of a school in which the needs of the individual and the community are both being served with due regard for the possibilities of art in practical affairs? The foreign children who attend this school come from squalid homes where often the bare necessities of life are wanting. To develop within the child an appreciation of a human home as opposed to a mere retreat is the first consideration. Each child is given a wooden box that he may convert into a house. As the game progresses he makes wooden furniture, merrily tacking it together with his little hammer. He hunts for different-shaped pieces of wood in the cupboard, choosing whatever he needs, as no two houses need be furnished just alike. He makes curtains and rugs and paints his house. His vocabulary grows rapidly. The child says: "I have a box. I cut windows. I made a house." These sentences are written on the board by the teacher. They are given to the advanced class in typewriting and these older pupils rejoice in helping to make a reading-book. The typewritten sheets are returned to the small folks, who seize them with all the joy of popular authors and bind them into little books. How they love to read them over and over! The older children do not play the game of keeping house but really enter into the serious problems of cooking, sewing, and dressmaking, making furniture and rugs, bathing babies in the day nursery, or trimming hats.

Schools in the poor quarters are perhaps more fully equipped for teaching home-keeping than those of richer districts, but even the poor little rich child has his opportunity for experience along practical lines that are cultural. The value of the work of the agricultural department in establishing school gardens cannot be overestimated. Beautiful, vigorous rows of growing things constitute a living lesson in art. This work has justified itself economically, pedagogically, and artistically. The drawing department was invited to help promote the potato industry. The children drew potatoes, carefully placing the eyes and learning stem end and bud end. They drew a potato sliced in two in the scientific way ready for planting. Finally drawings were made of the growing plant and leaf, and illustrations showing the class hoeing, weeding, or watering the garden. This series of papers was bound as a little book with an appropriate cover design. Proud children escorted me over a splendid garden and told me its history. A neighbor loaned several empty lots to the school. The transformation from weeds and dust to green things growing was so gratifying that she said the boys might remove an old fence so that the gardens might come on into the next lot. Finally with her approval the gardens marched right into her yard and the cottage was soon surrounded by an army of beets and cabbages, except in the lawn in front. On the other side were two homes with unlovely side yards but when the school gardens came marching in orderly rows up

to these premises the owners hastily improved conditions, borrowing cuttings from the school children to extend the flower borders, and making their grounds harmonize with the gardens. Dr. Denman Ross says: "We aim at order and hope for beauty." Possibly he was not thinking of a vegetable garden when he wrote this, but does it not apply to cabbages, onions, or beets marching in self-respecting rows across the landscape? Ask the Dutch painters. Surely they have convinced us that the uncombed wilderness is not the only source of beauty. The interest in the school garden usually results in the making of a home garden, the fruits of which are often proudly displayed at school and carefully labeled "Home Products."

We are sure that the slow, steady, continuous emphasis in school on the simple, orderly, and harmonious will have its effect. It is useless for us to attempt to force our standards on the pupils when they do not recognize the value of our suggestions. Freedom of choice is absolutely necessary if the child is to develop initiative.

One does not like to give the festive fly credit for establishing a common interest between school and home, but certainly he visits back and forth. The "swat-the-fly" campaign required endless posters and in the drawing classes we labored earnestly to give Mr. Fly a permanent place in art while openly encouraging the populace to destroy him. The nature-study department again proved to be a valuable aid to art by establishing "live boxes" at school. Delightful pets were always available for drawing lessons, and as the interest in the study of animals grew so did the art department flourish. When the supervisor of nature-study announced an exhibit of pets, pictures, and posters, boys and girls worked with tremendous energy to prepare pictures of Rover, My Dog, A Friend, Mr. Rooster, Our House, and various other members of the family of home pets. Studies by William Nicholson, Ernest Thompson-Seton, and Charles Livingston Bull were consulted for suggestions in handling drawings to be executed at home and brought to school for criticism. The exhibit was an unqualified success. Home interests, nature-study, and art were one. We all appreciate the joy of illustrative drawing which gives opportunity for the child to tell in picture-writing of his home and friends, his pets, his games, and occupations.

In planning a course of study, we must be on the alert to discover the relation between school and outside interests. The charm of teaching art lies in the unexpected. Our finest effects are unpremeditated. One formulates a new system at the end of each year. We must renovate steadily to grow. A course of study is a formula of an outlived doctrine. Only that course lasts which is capable of reinterpretation. We announce that our course in art will be closely connected with the child's interests. We like to say, "Education is life," but often, quite contrary to our theories, we endeavor to construct a perfect machine, not giving sufficient leeway for the unexpected which is the inevitable. It is the living mechanism that

counts—that incalculable human factor about which we cannot prophesy. A spirit of inquiry and investigation is better than a formula. We cannot speak with certitude of our accomplishments in this combining of home and school, because the thing in the process of construction we know least about, and only when it is outlived can we formulate it.

In speaking of art as related to the home, I have not confined my remarks to the work of the drawing department. It would be quite impossible to keep within such limitations because so often the art teacher is working with other departments. Many new fields of effort opened up in the last few years offer much in a practical way for developing the æsthetic side of the home. The art department must find in all these new fields fruit to garner. It matters little whether art, science, or history is in the foreground. Those who are able to utilize art principles for the best soul development will determine the line of advance, but if art be, as its disciples claim, a leading-up to the highest places, here is its opportunity. We will scorn nothing because it is humble or useful but we will rise above the sordid and servile. The art teacher must be a Post-Impressionist avoiding the morbid emotionalism of Cubist and Futurist, but ever striving for the fresh unhackneyed expression of individualism.

RURAL SCHOOLS AND COMMUNITY NEEDS

PERRY G. HOLDEN, DIRECTOR, AGRICULTURAL EXTENSION DEPARTMENT, INTERNATIONAL HARVESTER CO., CHICAGO, ILL.

(*Abstract*)

Professor Holden, in a wonderfully interesting extemporaneous address, urged the need of adapting the work in the rural schools to the local community needs.

"Education," he said, "if it is to be a preparation for life must be an actual experience in life." He pictured the depressing and deadening influence of the instruction that he had seen again, again, and again as he had visited rural schools, and urged the necessity of teaching real things and teaching them in a live way, and added, to further illustrate his point, that he thought to teach about real things in a dead way was even more disheartening than to teach about dead things or those of little consequence in a thoroly interesting and vital way.

Professor Holden illustrated his address with ears of corn, samples of seed, hitching ropes, and other objects familiar on every farm, and showed how many interesting things there were about each, and how many lessons of real importance could be associated with each; and how a boy's or a girl's chest could be made to puff out with pride when he or she had acquired some really useful piece of information about them or similar things that could be used at home to lighten labor or increase the family's production.

Professor Holden also illustrated his address with a number of charts such as he uses on his agricultural extension lecture tours. On each were plotted in a graphic way a large number of facts vital to every boy or girl interested in farm life, so related as to make their meaning instantly apparent and their significance easily remembered.

"Agriculture, domestic science, or manual training," he said, "trains the whole boy or girl. It may be possible to train our heads without training our hands, but we can never train our hands without also training our heads. These studies motivate and hence vitalize all school work."

The following are a few of Professor Holden's introductory charts:

TRUE MEANING OF THE PRACTICAL IN EDUCATION, OR WHY TEACH AGRICULTURE, DOMESTIC SCIENCE, AND MANUAL TRAINING?

1. The whole body should be trained.
2. We must teach in terms of the child's life.
3. Life is made up of problems.
4. We should motivate school work.
5. Gives strength thru doing something worth while.
6. Vitalizes all school work.
7. Develops interest—and interest is essential to best growth.
8. Teaches to think in terms of action.
9. Makes better citizens—morally, intellectually, economically.
10. Education is that training which fits for the duties of life.

"Study things—not books. If agriculture is to be taught as algebra is taught, we had better continue teaching algebra. Begin with something simple, easy, and immediately practical so that results can be readily seen; then proceed slowly and gradually to the more difficult. Don't make agriculture a subject all by itself; correlate it with the language, arithmetic, geography, and spelling work."

"Scientific courses in agriculture and domestic science are not expected of rural schools, nor do rural teachers need special training along these lines before beginning the work. Don't try too much."

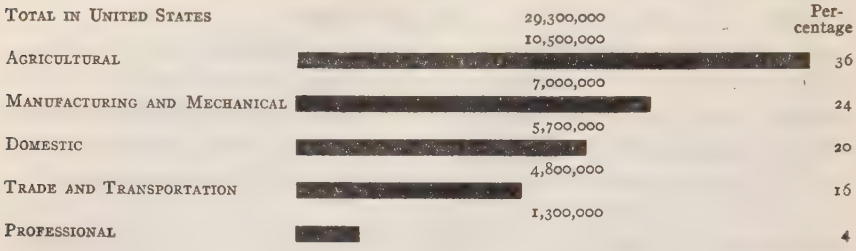
SOME DON'TS

Don't try to teach everything.
Don't try to teach all the pupils.
Don't use too much time.
Don't teach names—names.
Don't begin with the school garden.
Don't begin with the curious and fanciful.
Don't think you must know everything.

"Our schools, as usually organized, benefit most those who are training for the professions, or only 4 per cent of all engaged in gainful occupations. This educational system will be greatly changed within the next fifty years.

We will not cease training for the professions, but we will provide means for the training of the 96 per cent engaged in other occupations."

PERSONS ENGAGED IN GAINFUL OCCUPATIONS



"Take up something closely connected with the life of the community, and stay by this one thing until it is thoroly understood, and made practical and vital. Then begin another line of work."

SOME THINGS TO TEACH

Begin with the useful:

Corn	Potatoes	Bread
Weeds	Insects	Sewing
Soil	Rotation	Spraying
Dairy	Clover	Aid to sick
Knots	Garden	Removing stains

"Education is fitting the boy and girl for the duties of life. Let the boys and girls learn to use their heads—the girls in making homes, the boys in a man's work about the place. The way to do this is to let them study the things about them. Let them tell of the corn, the weeds, and the insects in their language work. Let the boys learn how to germinate seed and the girls how to prepare wholesome food."

"A practical education makes efficient citizens—citizens who are able to think in terms of action, citizens who can meet and solve problems because all thru their school course they have been receiving training in meeting and solving problems."

Again, he illustrated his address with simple experiments of a kind that he said school-teachers everywhere ought to use to teach the great truths of nature, in but a few minutes of time, and in a way that never could be forgotten. To refer to a typical one, he placed upon the bottom of an overturned tumbler a few drops of water, and from a fountain pen added to the water on the bottom of the tumbler a drop or two of ink so that it could be seen in all parts of the hall. Then he took a lump of common loaf sugar and on the top of it placed a little heap of ordinary powdered confectioner's sugar, and asked his audience to watch the result carefully as he placed it in the few drops of ink-stained water on the tumbler. With surprising rapidity the discolored water was sucked up until it reached the

top of the lump of loaf sugar, and then it was suddenly checked almost as tho it had reached an impenetrable division between the loaf sugar and the finely powdered sugar that had been placed above it. A fraction of a second, or at the most a second or two, was all that was required to traverse three-quarters of an inch in the crystalline loaf sugar; but in the ten or fifteen minutes that followed the stained water had not progressed even an eighth of an inch into the finely pulverized sugar on top.

This experiment, Professor Holden declared, a boy could so easily appreciate and remember that as long as he lived he would understand why it was important to cultivate and pulverize the soil at the surface when it was desired to husband the moisture within for the benefit of the crops. And this experiment illustrated as well, he said, the great principle that underlies the science of dry farming which has done so much to reclaim great areas of waste land in many western states.

"LIFE, TOO, IS AN ART"

CAROLINE BARTLETT CRANE, SOCIAL AND SANITARY EXPERT, AND INVESTIGATOR OF MUNICIPALITIES, KALAMAZOO, MICH.

I grant that life is not an art for all, and cannot be, until newer ideals of civilization arise and embody themselves in law and custom. But the public school is the nursery of this ever-bettering civilization, tho failure to establish close relations between knowing and doing has cost our schools untold wealth in efficiency. Manual training and art are designed to bridge that hiatus in our educational system. Its leaders are attacking that poisonous fallacy in education that the school years are a season of "preparation for life," instead of a most vital part of life itself. We look forward hopefully to the time when the child will express himself as definitely in the business of study as in the business of play, where he is making life an art, because he is striving to actualize his ideal. "Trailing clouds of glory doth he come" to the schoolhouse door. Why is it that so soon these clouds "fade into the light of common day"? Is it because the child is there met by the teacher who has never beheld the vision which forbids her to call any day "common or unclean"?

This is the teacher in whom the tentative attitude of school days persists; who still refuses to see that "life" has arrived; who treats the present as a negligible period of transition and puts up with unworthy and undignified makeshifts of surroundings and behavior that have less than no acknowledged place in her radiant "scheme of life."

Take the teacher of household science and art. Her vocation introduces her into the holy of holies of this world—into the seat of life.

I could wish two things: That every public teacher of household science would strive to know the environment, domestic and civic, of her pupils,

even as the successful settlement worker knows her field. And then, that every teacher, like many a settlement worker, would put her knowledge and character to the test by creating, out of the simplest elements and in a not too favorable environment, a true little home, where, with no advantage above her neighbors except that of knowledge and character, she should live her daily life as she thinks life ought to be lived. Her daily life—first, those fundamental, elemental things which are the very staples, as it were, of the art and science which most of you teach, the beautiful ordering of the home itself, and all the processes and activities of life therein. Unless we are mistress of our physical conditions and surroundings, life is cluttered, hurried, irritating, no matter how much we know about the arts of life. Let us never postpone simple, clean, dignified, wholesome daily living as physical beings, whose bodies are worthy of this respect and will reward our spirits in manifold ways. It is my belief that more irritability, depression, incompetency, and spiritual malaise in women arise from lack of mastery of their immediate physical environment than from any other one cause. And yet most of our schools of "higher education" for girls have no time or place for household science. All the more must the primary and secondary schools, and the higher co-educational schools, do their duty toward the women and the homes of tomorrow.

The great lesson to be learned is simplicity. Life, doubtless, can be lived as an art amid costly tapestries and inlaid ivories and sumptuous fare; but life can much more easily and surely be an art without them. It takes a great gift for perspective, under these circumstances, to keep the mere "things of life" from crowding the foreground. I think the woman who could do it most successfully would be that one who, first, "in a Dakota claim shanty," thirteen feet by nine, could look life in the face and write:

> And I the priestess? Ah! I would
> The gifts and grace were mine
> To be the priestess that I should
> In a house thirteen by nine.

Granted that we each live life as an art on the physical basis, may I say a word to you, as women and teachers, concerning the conquest and enjoyment of countless factors of happiness now—not postponing our appreciations and our best undertakings any longer. Do not let Lowell's words be true of us:

> . . . . *Now* ain't jest the minute
> That ever fits us easy while we're in it.

Now is life. And life is a cup running over with blessing for most of us if we have sense and sensibility to know it. A physician told me of visiting a woman who had been so injured that one leg must be amputated. She was horribly unhappy, and he tried to console her as best he could. "O, please don't talk to me!" she exclaimed. "You don't understand. It isn't so much that I have lost a leg. It is that for forty years I have had two good legs and never gave them a thought!"

I hope, in the end, this poor woman will come out of her trouble like the woman who lost an eye. She had always been rather sour and disagreeable. She suddenly became sweet and charming. She said she had found out that it was a great thing to have one eye!

You have real troubles and handicaps? If your trouble is that you don't like to teach, I never would do it—it is injustice to yourself and to your pupils. And in this day of varied activity for women, it is quite unnecessary. But any art that we would teach, we should also live.

As to handicaps, much of the best work of the world has been done under handicaps. It was a deaf-dumb-blind girl who wrote the world's classic on "Optimism." If someone hadn't thrown a piece of dry bread into young Prescott's eye and caused his blindness, he was of opinion that he never would have concentrated to write his great histories. Darwin's friends thought his invalidism possibly helped him. Sometimes he could work only two hours a day—so he worked. His son said he was the only person he ever met who "appreciated the difference between fifteen and ten minutes." My young friend, a teacher of physical culture, was a fairly good teacher till she began to lose her hearing. She has had a terrible struggle—has had to learn lip-reading as her hearing went—and she has developed, from a "good" teacher, into a pre-eminently good one, probably the best and most famous in her state. She is a radiant kind of woman now; she was not so before the handicap which roused the utmost of her mental and spiritual resources.

The greatest handicap is self—crowding impudently into the forefront and spoiling the picture. Life is not an art except the "values" are correct as we can make them. We all had hopes and expectations in our youth which have not come true. (That is what makes youth hold its head so high.) We perceive that we can't build that glittering mansion of our dreams. The cynic bids us gather what materials we can and build a woodshed. O, yes, we can build the mansion—not yours, or mine, but ours—the mansion of the future for the children of today; and we are building it, hour by hour, as we live sincerely and bravely before their eyes the life that is ours to live.

SOME IDEALS IN HOME ECONOMICS TEACHING

ALBA BALES, HEAD OF DOMESTIC SCIENCE DEPARTMENT, LEWISTON NORMAL SCHOOL, LEWISTON, IDAHO

There is at the present time a great awakening among women as to their own capabilities. They are looking for larger lives, broader education, and a greater development. Woman's development in all the ages, it must here suffice for us to say, has been thru education of the most practical nature; her influence has always been of the conservative type. Her disposition has been to settle down, to congregate, to unify, and to develop

the industrial spirit. The first stable society was a mother and her helpless infant.

In the transition from savagery to civilization, women have continued to go on housekeeping, doing the same things as women did of old, only making use of better appliances. Doing the same things and thinking the same thoughts, from generation to generation, change bodily activities and mental processes into semi-automatic habits. As commonly expressed today, homemaking is largely an instinct. Because of this prevalent belief, especially among women, it is often thought that the problems of the home may readily be solved by the woman after she has a home of her own. This is a terrible mistake. The girl of today must be trained for her life-work.

Home economics, when it comes into its own, will be a great factor in the fields of both elementary and higher education. It will make possible for girls the training that is necessary for the richest individual and family life, and also for the enlarged social life that our democracy requires. The true home economist does not wish to take away from a single woman any phase of broad intellectual training. She hopes only to indoctrinate such studies of the family institution and of home science as best fit the girl for the stimulating profession of housekeeping and give her an appreciation of the art of homemaking. If Latin and Greek mean more than real mental discipline, and if the thoughts of the classic immortals illumine and enrich and sweeten life, they, too, are valuable in the girl's training.

Many misleading articles have been written in our best magazines against the influence of technical education as compared with the refining influences of the so-called cultural courses. A woman who holds a professorship in a classical college, expressing her views of domestic science in an article written in the *Atlantic Monthly*, makes these statements:

> There is absolutely nothing in domestic duties themselves, or in any form of manual labor, which develops the mind or elevates or broadens the character. The idea that every woman needs practical instruction in housekeeping as a part of her education is as absurd as would be the claim that every man needs to be taught in school to plant corn or milk a cow. If there accrues to woman as much mental and spiritual development from learning to do well all things connected with domestic life as from the study of books why, I ask, does not the fanatic on industrial education intrust the entire rearing of his children to his Irish nursegirl? Why does he not marry his cook?

Such expressions show what entirely unfair and extremely narrow views are still held of training in domestic science. When the renaissance in professional homemaking has dawned, and the majority of homes are maintained by women who put intelligent thought into their work, the schools may not need to duplicate the girl's home training. At present most homes do not teach the processes of food preparation and garment-making. The public schools are trying to meet the need in the girl's education. When the homes and the public schools working together can give every girl a fair chance to learn the use and handling of the food

materials of the family and how to make the simple clothing necessary for the comfort of the family, home economics training for college women can be based on dignified courses in artistic, economic, scientific, and sociological studies of the home.

Without question, among the most important courses for advanced training in home economics are the science courses, particularly those concerning physiology and the hygiene of nutrition. Physiology is the foundation of hygiene, and an intelligent study of the human body must be preceded by the sciences of physics, chemistry, general biology, and zoölogy. After such introductory study the student is ready for definite instruction in anatomy.

God created the human body and called it his greatest work. Should we remain in ignorance of the care of this creation? Our religious creed might well be based upon personal hygiene. One of the most important phases of personal hygiene is that of nutrition. The subject should be approached thru a study of the physiology of digestion followed by a study of the service of foods in the body. Elementary physiological chemistry gives the students definite conceptions of the chemical problems involved in metabolism, and they should gain enough knowledge of chemistry to enable them to appreciate its bearing on their work, and to realize the dignity of the technical subjects in home economics.

If, however, we are to place the study of cookery on a higher plane, the college student who works with foods must have a thoroly scientific point of view. The importance of this viewpoint to the housekeeper is apparent when her responsibility in the nourishment of her family is realized. Energy for bodily growth, for play, and for clearness of the brain, is all produced from food. The problem is not only to ascertain the right amount of nourishment, but also to preserve the bodily equilibrium by supplying it with the right proportions of the various food principles. Many children have low vitality, many are backward in school, and many more are morally weak because mothers do not know the principles of nutrition. The mentality and the morality of an individual, therefore, are also governed to a great degree by his nutrition. How grave is the responsibility of the woman in the home, and how great, to the intelligent observer, is the contrast between the so-called "cook" and the trained home scientist. Well-planned and well-organized science for young women is providing instruction which is assisting greatly in the decrease of infant mortality, in the promotion of longevity, and in the betterment of social conditions.

The household is the unit of social progress. It embraces the three institutions—marriage, the family, and the home. Sociology, the science which attempts to explain human experiences in social living, is most closely related to household science. The sociologists are prone to say that household science is but an application of their ideas. The home economist realizes the importance of this relation in household education

and appreciates the fact that the sanctity of the home will not be lessened by a larger and more sympathetic relation between family life and the larger social life. Courses in sociology, therefore, are becoming popular to the student of household science, and have a far-reaching interest. The larger views of social life and ethics which such study presents should aid women in many ways, especially in rightly viewing, if not in solving, the "servant problem." This problem cannot be fully solved until the right relation exists between household employer and household employee.

In considering the ideals of home economics, we cannot overlook the arts of homemaking. One of the most important of these is the art of house-furnishing. This requires earnest study if the product is to be a really beautiful home. Fine furnishing is not so much a question of money as of right thinking. The home should be a place in which the soul can grow; and growth of soul is retarded when lack of harmony disturbs the finer sensibilities. It is the peace of mind that comes from beautiful surroundings that makes the æsthetic side of homemaking of universal interest.

In this experimental stage of industrial education, our ideals in the teaching of home economics are still expanding. The world never offered girls such opportunities to study live and fascinating problems of the social, political, and industrial world as now. There never was an age of greater achievement in really cultural education than the present one. And if we keep girls healthy and asking "Why?" and set them free in this cosmos of our social order, they will develop into women with intellectual powers and aspirations, citizens prepared to do their part, and trained workers competent to perform such service as will justify their existence in the homes of our country and in the social groups of which they form a part.

DEPARTMENT OF MUSIC EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—Agnes Benson, supervisor of music, public schools.....Chicago, Ill.
Vice-President—Will Earhart, director of music, public schools.....Pittsburgh, Pa.
Secretary—Elizabeth Casterton, supervisor of music, public schools.....Rochester, N.Y.

FIRST SESSION—Wednesday Afternoon, July 9, 1913

The meeting was called to order in the First Congregational Church at 2:30 P.M., by William A. Wetzell, supervisor of music, public schools, Salt Lake City, Utah.

In the absence of the secretary, the chair appointed Lucy K. Cole, supervisor of music, public schools, Seattle, Wash., secretary *pro tempore*.

The following musical program was then given by the Springville High School Chorus, Springville, Utah, under the leadership of Mark Robinson, supervisor of music, Springville, Utah.

Water Music . . . . . *Offenbach*
(Paraphrased from orchestral intermezzo in "Tales of Hoffmann")
Ensemble (From "Chimes of Normandy") . . . . . *Planquette*
Sweetest May . . . . . *Evans*
Praise Ye the Father . . . . . *Gounod*

The chair changed the order of the program scheduled for the day by introducing first the paper by Albert E. Winship, editor, *Journal of Education*, Boston, Mass., entitled "Music and Ethics."

Lucy K. Cole, supervisor of music, public schools, Seattle, Wash., then gave a paper on "Music and the Social Problem."

A paper entitled "Music That Pays Dividends" was next read by Alice Louise Reynolds, Brigham Young University, Provo, Utah.

The meeting then adjourned.

SECOND SESSION—Thursday Forenoon, July 10, 1913

Supervisors' Round-Table Conference

The meeting was called to order at 9:30 A.M.

William A. Wetzell, supervisor of music, public schools, Salt Lake City, Utah, read a paper entitled "Hints to Supervisors."

"The Report of the Committee on Terminology" was then read by William B. Kinnear, supervisor of public-school music, Larned, Kans.

A discussion followed resulting in a motion that the matter be referred back to the committee for a more definite and clear statement. Motion carried.

The report of the Committee on Nominations was then given by the chairman:

For *President*—Agnes Benson, supervisor of music, public schools, Chicago, Ill.
For *Vice-President*—Lucy K. Cole, supervisor of music, public schools, Seattle, Wash.
For *Secretary*—Glen H. Woods, St. Louis, Mo.

The report was accepted and the officers unanimously elected.

Frances E. Clark, public-school educational department, Victor Talking Machine Company, Camden, N.J., gave a talk on the use of the victrola in the schools.

The meeting then adjourned.

Lucy K. Cole, *Secretary pro tempore*

THIRD SESSION—FRIDAY AFTERNOON, JULY 11, 1913

The meeting was called to order at 2:30 P.M.

A paper on "The Voice" by Evan Stephens, director of Tabernacle Choir, Salt Lake City, Utah, was read by William A. Wetzell.

A demonstration of music in the high schools was then given by classes from the Springville High School, Springville, Utah, under the direction of Mark Robinson.

It was moved and carried that the Committee on Terminology be continued. This had been overlooked at the meeting on Thursday forenoon.

The program was closed by songs from the Springville High School Chorus.

WILLIAM B. KINNEAR, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

MUSIC AND ETHICS

A. E. WINSHIP, EDITOR, "JOURNAL OF EDUCATION," BOSTON, MASS.

Why teach music in public schools? Why not have that as a luxury to be taught at the expense of parents?

As a vocation it has claims in this vocational age but that does not concern us now. As a social grace, as the least expensive culture adjunct to the home, it is significant, or would be if there were not such a shudder whenever the word culture is mentioned, but that does not now interest us. As a hygienic function much can be said of music, its rhythm and its cheer, but we pass that by also. Has music an ethical value? Can school music be made to contribute to the safety of our girls, and, possibly, our boys?

Just now the one noble fad, if a fad can be said to be noble, is a literary, philanthropic, and semi-political crusade which is certain to wipe from all American cities the disgraceful professionally bad restricted districts. If school music can be shown to have a distinct and unquestioned positive or preventive moral force, its universality and its permanency are established beyond question.

It is no part of a teacher's business as a teacher to engage, directly or indirectly, in a campaign against vice in New York, Chicago, or elsewhere, but rather to deal with the tendency of life, with starting children right. The vice commissions have made clear that even in the most extravagant claims only a trifling proportion of the thirty million women and girls, within the zone of liability, are bad, and that most of those few have had to be kidnapped into their present life. Whatever the school does for morals, therefore, must have in mind the broadest possible view and deal with the trend of thought and emotion.

Education is starting children in the right direction. The ethical mission of the school is to establish hope as a habit of mind. That is heaven. "The kingdom of heaven is within you." Fear as a habit of mind is the other place. "The other place is within you."

Music is the sunlight of hope, the purifying ripple of the water of life, the eliminating vigor of pure air in us and over us and about us. But there is music and music, just as there are water and water, sunlight and sunlight, air and air. A sunstroke is the worst mental collapse, stagnant infected water means a scourge, contaminated air means an epidemic.

Morally there is music of the lower world, the ragtime of the street, the voluptuous new swing of the dance hall. These are not music in its sweetness and purity, in its nobility and vitality, any more than a smirk is a smile, or than giggling is laughing, or than the idiot's grin is the joyous illumination of a father's greeting of his first born.

One mission of the school is to throw over every child's life in school years all that is best, purest, noblest in music.

I know an orchard neighborhood that is waging an expensive warfare on the blue Canadian thistle, and it looks like a hopeless struggle. A few miles away there are 144 acres of the world's best orange orchards and not a blue Canadian thistle is there. The proprietor knows full well that this particular pest cannot thrive in soil that is not aciduous and he tests his soil several times a year for acid and when he finds it, on go the chemicals or fertilizers that make it alkaline.

Ragtime music is a symptom. It is a revelation of social or individual soil conditions. You might as well fight the blue Canadian thistle with resolutions in a kindergarten convention as to campaign against ragtime by denunciation in a church prayer-meeting or a Christian Endeavor convention.

School music is not for the teaching of facts about the staff and clefts, pitch and tone, sharps and flats. Incidentally important, but, stopping there, it is as characterless and hopeless as a deserted mining camp with a lot of débris-filled cellars abandoned before anything was built thereon.

Discrimination between the noble and ignoble in music is walking along the highways of the celestial city. Appreciation of good music is worth infinitely more than the ability to read the notes technically and lifelessly in an "exercise."

When a teacher of music says to her class, "We will sing on page 23," I know what to expect. When she says, "We will sing 'Juanita,'" and the class turns to it instinctively, I know that I am in a different world. But when Mrs. Parsons with her seventy boys in the Polytechnic High School of Los Angeles does neither, but merely touches the keys of the piano, and every boy's face lightens and brightens as he turns to the song, it is entirely certain that there is music in the air.

Music must be lifted heaven-high above the multiplication table and the spelling-book before America can reap the social and moral effects of the possibilities of the ethical power of school music.

Morals are but the fruitage of manners. If you see anyone cleaning his finger-nails in public you know the quality of his manners. "Isn't it better

to clean them in public than to have them go uncleaned?" Surely, but whoever cleans them only when he sees that they need it cares more for his reputation than for his character. Every personal matter is for private attention and public attention is vulgar. Morality like manners must be a habit of mind, and must be established in the mind-habit-forming years.

Appreciation of masterpieces in music, vocal or instrumental, make it as impossible for one ever to seek pleasure in a dance hall as for one trained in gentle manners to sit with his hat on in a private parlor.

There are personal and social morals. No morality is high and noble that does not project itself into the public life of the individual.

The conflict of the ages is at its height just now, here and everywhere. What is one's relation to the public? Shall I be individually a nonentity and do as others do everywhere, regardless of my life convictions and habits? Shall one be a sport when with sports and partake of the Lord's Supper when the guest of a prelate?

On the other hand, shall one be a social nuisance and intrude his personal views upon everybody everywhere? A man brought up on the seashore, with a lifelong admiration for the roaring of the surf, is a public nuisance if everywhere and with everybody he whines because the Mississippi has no surf, because the Rockies have no ocean view. There is no more morality in being an individualistic crank than in being an individual nonentity.

Morality is uniformity and universality in social masterpieces as it were.

There is a disk for the victrola that cost six thousand dollars; that is, four of the world's great vocalists were paid six thousand dollars to sing therefor. No other such a quartet is known—one that can sing with such perfect skill and at the same time with such high art and become eternal thru this mechanism. So morality is only noble when it harmonizes with the social world in a register that will make it immortal.

MUSIC AND THE SOCIAL PROBLEM

LUCY K. COLE, SUPERVISOR OF MUSIC, PUBLIC SCHOOLS, SEATTLE, WASH.

Mankind at work is thoroly moral. During working hours, brain and sinew are keenly and intensely active, but during leisure hours emotional life asserts itself. This is particularly true of that class of laborers whose work admits of little or no emotional activity. It would seem, therefore, that our social problems are largely the result of the way in which society uses its leisure, or rather, the manner in which society satisfies or expresses its emotional life.

Society seems perfectly willing to pay enormous sums annually for the maintenance of a large police force, ample prison accommodations, insane asylums, orphanages, penitentiaries, divorce courts, etc., all of which

institutions are the direct result of misused, unrestrained, uneducated emotional life.

Would the public be put to any greater expense in furnishing definite, systematic education for emotional life than it is at present in the maintenance of these institutions? Why should not our schools educate for leisure as well as for work? If we would solve our present social problems, we must come to it. It may not be practicable for the schools to undertake this new educational phase at present, but it must be carried out in some way at public expense and under educational rather than political supervision.

We educate too much for getting a living and not enough for living. Too much stress is put upon how to earn the dollar and not enough on how best to use it when earned.

In the mind of the general public, industrial education is regarded as a succcessful and as a permanent factor in our educational scheme. Some of our best educators, however, regard it as still in the experimental stage. Enormous sums of money have been spent in this educational experiment in the past fifteen or twenty years. Who can estimate the value to society if the same sums were spent annually on systematic education for leisure or emotional life? Emotional life is only indirectly and remotely touched in our present system of education. Much more could be gotten out of the study of history and literature than is at present. There are many phases in our curriculum where emotional life could be touched most effectively if attention were directed in that way.

The only amusement sanctioned by the school authorities is athletics. These sports minister largely to physical life, and are participated in by so few of the general student body that they can hardly be said to be a part of the educational system.

We hear so much nowadays about the low standard of morals among our upper grammar- and high-school students. Small wonder that young emotional life goes wrong when it has had little or no guidance either at home or at school. If the higher emotional life is not given constant and satisfying activity from childhood to maturity, it is not surprising that the lower emotional life becomes active. The habit of responding to the higher emotional life should become fixed and strong during childhood. Talks and lectures on social hygiene are not enough. They instruct as to the terrible results of following the lower emotional impulses. The only way to eradicate an evil is by substituting an equally attractive good. We should provide wholesome and refined mediums of emotional expression for our young people. Music and the various forms of dramatic art are the universal mediums of emotional expression. The hearing of good music and drama and the reading of good fiction are not enough. The actual performance of music or drama is what is necessary to young emotional life. It is the desire to express the surging, throbbing, new emotional life which must be satisfied.

Right here comes the great moral value of instrumental study for children and pupils during the adolescent age. Nothing is more valuable to a boy during this age than the ability to play some one of the orchestral instruments, these one-voiced instruments being given the preference over the piano, because of their use of melody, which is the emotional side of music and hence furnishes a more satisfying medium of emotional expression.

The English school authorities have taken a most commendable stand along this line. In most of the cities of the British Isles, the school authorities furnish violins at factory prices to all children desiring to learn to play this instrument. They also furnish instruction in classes of not more than ten. In London alone there are over four hundred of these violin classes. It is estimated that over half a million children thruout the British Isles are receiving instruction in these classes.

Last July, in Alexandra Palace in London, was given a most wonderful exhibition of the results of this work in the playing of four thousand children in violin ensemble. Consider for a moment the effect of such work upon these four thousand children themselves. Simply being a part of such a performance brings an uplift and impetus toward art development that cannot be estimated. These children, while practicing on their violins, are kept off the street, their music brings a new cultural element into the home and imparts to the whole family a deep feeling of pride and self-respect. Its value toward good citizenship for England's future generations cannot be measured. Such an educational movement is a distinct national asset and should be fostered and encouraged by government as well as school authorities.

It is a beginning in the right direction and if carried out more broadly will go far toward solving some of England's many social problems. The movement, as you know, originated in the little town of Maidstone, England, and was started for the purpose of stimulating a love for orchestral music. The idea was soon seized upon by an enterprising business firm dealing in orchestral instruments. This firm, Messrs. Murdock & Co., offered to provide instruments and, if desired, a teacher to any pupils wishing to learn to play the violin. When the educational value of the plan became evident the school authorities took it up with the results above mentioned. This is as it should be—the education of emotional life thru a refined medium of expression at public expense.

An American adaptation of the Maidstone movement has been carried out in six of the public schools of Boston this past year by one of the assistant supervisors of music, Dr. Mitchell. Wonderful results have been obtained with these classes in just one year.

We have something similar to this English movement in America in the school music settlements of our large cities. In these schools instruction is given at a very small tuition and many who could otherwise have no music instruction get it here.

But these schools are all under private management and are made possible by the generosity of wealthy citizens. All this should be provided by our public education fund. It should be carried on as a part of the educational system—as one of the branches in the department of education for leisure.

But America is drawing on its public funds for the musical education of its people otherwise than thru its public schools. The wonderful success of municipally controlled music in New York and other eastern cities has opened a new field of responsibility for our civil authorities and has shown us also, in this short time, the great value of music as a sociological factor in community life. The moral results upon the masses are sure to follow, as is shown by the following incident which occurred at one of the first concerts given under municipal management in New York. At the close of the concert, a few stalwart representatives of the people approached the conductor with this remark: "Say, boss, cut it out. We want ragtime and plenty of it. We're tough and we want to stay tough and we're proud of it." This recognition of the character of the music played and its moral effect upon them was a most powerful argument in favor of the continuance of just such programs. It is reported, however, that this conductor thereafter kept some ragtime selections at hand to be used in case of emergency, and it is further stated that by the close of the summer this audience had come to really enjoy the programs of good music. At present, however, this municipally controlled music is confined to the summer-park music, except in a few of our large cities. It should be carried on thruout the whole year. During the winter months, the saloon, the dance hall, and similar places take the place of the parks in summer. What kind of music do we find in these places? Usually ragtime of the lowest type, coon songs, and the so-called "suggestive music." The saloonkeeper and dance-hall proprietor are neither musicians nor psychologists but they know from experience the kind of music that promotes their business.

The large majority of our pupils leave school between the ages of twelve and sixteen to enter factories, stores, etc. Those who have played in school orchestras have not acquired sufficient technique to enable them to belong to orchestras composed of adult professional musicians. With no incentive to practice, the instrument is often laid aside. It will be five or six years before these boys and girls are old enough to enter adult choruses. During these years they are likely to lose their interest in this phase of music. When they leave school and enter business life, we lose track of them and they are soon forgotten. But they, on the other hand, sorely miss the influences of the schoolroom, the sympathetic smile of the teacher, the cheer of companionship, and all that goes to make up the joy of school life. Just here is where the saloonkeeper and the dance-hall proprietor step in and in their ignorant and wholly commercial way meet the needs of these young people—the need of entertainment and opportunity to meet socially.

Could not the needs of these young people be met in an extension course in music and art, carried on under public-school supervision and at public-school expense? Pupils love to return to their school after leaving to go to work and would return gladly for evening or Sunday classes in music or dramatic art if these were provided at their school buildings. This idea could be carried out easily in cities where evening schools are maintained. This year in Seattle we have had sight-reading classes and chorus work in our evening schools—also some very interesting concerts. The Amphion Club, a male chorus of some sixty voices with fine soloists, gave one concert which was greatly enjoyed by the evening-school students. The Donner Orchestra, thirty-five pieces, also gave a most interesting program. These concerts were given by these societies complimentary to high-school students, but were given at the high-school buildings and on the night when evening schools were in session so that the programs could also be attended by evening-school students. If our evening schools could only offer courses which would lead to the right use of leisure; courses which would teach all forms of music and dramatic art expression and thus create a desire for higher standards in theatrical and musical performance!

Could we not have a national organization among our musicians which shall do for the people musically what the Drama League is doing dramatically? With a national organization of this nature we could accomplish wonders for the musical education and uplift of the common people. With a central national organization and associated working centers all over the country, systematic study clubs could be organized, people's choruses conducted, bands and orchestras maintained among the non-professional, and festivals and pageants given by the laboring people.

At present the thought seems to be largely to provide amusement and entertainment for our young wage-earners, but there are many among them who would gladly embrace any opportunity offered for self-improvement along cultural as well as industrial lines.

The schools work constantly toward good taste in music, art, and literature. The pupils are just beginning to understand and appreciate their efforts when they leave for the commercial world. This same commercial world offers them amusement and entertainment and they accept what is offered, not having gone far enough in school to have formed fixed habits and a taste for better things. Soon the impressions of their earlier training are gone. If the needs of these young people could be met by public-school extension courses, much social evil would be prevented.

Definite and concerted efforts should be put forth by the musicians of the country toward the extermination of the so-called "suggestive song" which is doing more harm among our young people at present than possibly any other one thing. The almost universal use of these songs on the dance programs is most deplorable. Our young people are finding the conventional waltz and two-step monotonous and lacking in variety. This is

undoubtedly due to the almost universal use of folk dancing in our schools. Why should these same dances not be introduced into the social dance programs of our boys and girls? The ultimate outcome of their use in school should be the creation of some truly American folk dances.

Possibly it is unnecessary to form a new national organization similar to the Drama League in order to accomplish the desired ends. Possibly this work can be done thru the National Supervisors' Conference or thru some branch of the Federation of Musical Clubs or thru the Department of Music Education of the National Education Association, or the Music Teachers' National Association. But strong, concerted, national effort should be put forth toward securing more definite systematic education for leisure in the schools of the country; more educational rather than commercial provision for and supervision of our amusements; more definite and systematic effort toward providing means for cultural improvement for the young wage-earners; toward exterminating the "suggestive song"; toward providing a better class of music for our dance programs.

We shall be entirely satisfied when as much is spent annually from our public funds for education toward the right use of leisure as is at present spent in defending the public against the wrong use of leisure.

When musicians, educators, and philanthropists work together in this great upward movement we shall see marvelous changes in our social conditions and the great problems of today will be materially lessened if not done away with entirely.

MUSIC THAT PAYS DIVIDENDS

ALICE LOUISE REYNOLDS, BRIGHAM YOUNG UNIVERSITY, PROVO, UTAH

Robert Browning called music the greatest of the arts. He pointed out that while architecture, sculpture, literature, and painting produced masters of the first order in comparatively early times, the names of our greatest musical composers are nigh unto our very door. The reason for this, as Browning saw it, lay largely in the superiority of music over the other arts.

I make a plea for a class of music that I choose to describe as music that pays dividends. Some music will pay small dividends, other music fair dividends, and yet another class large dividends.

Several years ago I listened to a well-trained choir, in a normal school, singing the "Pilgrims' Chorus," from "Tannhäuser." It was the music that attracted me. I had never heard that music before; so afterward I asked the conductor about it. He told me that it was the music of Richard Wagner, and that the chorus was from "Tannhäuser." Of course I had heard of Wagner and of "Tannhäuser," but knew nothing of the opera at that time.

That afternoon I went in search of material, and made the story, with which everyone is familiar, my own.

Later, when I found myself in Germany, one of my first impulses was to visit the scene of this story. Our little party made its way directly to Eisenach. There, among the loveliest of German hills, stands the old castle of the Wartburg, where Martin Luther was confined and protected. It is a palace overlooking the black forest of Germany—a forest most attractive.

Very soon we were inside the palace. Suddenly we came to a room in blue and gold, and our guide remarked: "This is the hall of contest." I peopled that hall as best I could; I placed therein Elizabeth and Tannhäuser, for I had not yet seen the opera.

A few weeks later, I witnessed in the opera house in Berlin a performance of "Tannhäuser." I shall never forget the satisfied feeling I had when the curtain was raised, and I saw first an exterior view of the Wartburg, in all the luxury of its green foliage, and later the hall of contest, realistic to the blue paper on the wall. I felt that I had suddenly been transported to that lovely spot.

One year ago, at the National Education Association in Chicago, I sat in the auditorium hall and listened to the organ prelude, which chanced to be the march from "Tannhäuser." Quickly the auditorium hall passed away—I was in the opera house in Berlin, watching that wonderful group of mediæval ladies and gentlemen as they passed along keeping step to the stirring music of the march.

The "Pilgrims' Chorus" can never again be to me merely a musical selection. The first act of the opera must always arouse for me all the beauty and sensuality of pagan Greece, while bound up with the famous procession of the pilgrims is all the Christianity and self-abnegation of our mediæval world.

Later, walking thru the rooms of the famous art gallery of Dresden, I noted a number of paintings that had drawn material from the various legends extant, relating to Saint Elizabeth. Before leaving Dresden, I saw Hofmann, the painter of "The Christ Child in the Temple." The venerable artist had passed his eightieth year, and was then at work on what was perhaps his last great painting. We were not a little surprised to find, after all of his devotion to biblical subjects, that he was working on what promised to be a most gratifying portrayal of Saint Elizabeth.

That which every seeker after knowledge knows to be true is that any information paves the way for adding to our information. Knowledge is a magnet that attracts knowledge. Having learned the story of Tannhäuser, and having gone to Thuringia, it was quite natural that we should come in contact with other legends associated with Saint Elizabeth.

Franz Liszt took as the subject of one of his great oratorios "Saint Elizabeth," being deeply interested in the church, and finding in the story

of Elizabeth excellent material for his great oratorio, thru which he desired to manifest the power of the church. Wagner was not attracted by the religious significance of the story; all its great dramatic possibilities appealed to him, and wherein it was lacking, he supplied, by the aid of his great inventive genius, in a truly marvelous fashion.

The version of the story, made use of by Liszt, runs much as follows: Elizabeth of Pressburg, a princess of Hungary, married the Landgrave of Thuringia, whose palace was at the Wartburg. Some time after his marriage he was called forth to war, and was compelled to leave his wife to the not very tender mercies of her mother-in-law and the court. She often met the poor people in the forest and often gave them bread. Complaint came from the court that she was making a draught on the resources of the palace, and plans were made to thwart her.

One day she was met in the forest, and inquiry was made of her concerning the contents of her apron. "Roses are what I carry," she replied, but being pressed to show, she changed and said: "I have bread and wine," but as her apron fell only roses fell therefrom. When the Landgrave returned his relatives complained most bitterly of her conduct, and he, too, chided her severely. She continued to be the victim of misunderstanding and abuse, and was finally driven forth into the wilderness to die.

Rose Monday, observed by the German nation as a national holiday, commemorates this legend.

Elizabeth, the beloved wife of Franz Joseph, emperor of Austria, who was assassinated some fifteen years ago, is associated with Saint Elizabeth in the minds of the Austrian people.

Liszt's famous oratorio has been adapted to opera, a beautiful and fitting climax having been added. Every year on the anniversary of the empress' birthday, and only on that day, this opera is presented in the royal opera house in Vienna. I believe this particular opera is never presented elsewhere.

One of the newest and most beautiful palaces in all Europe is the Hungarian palace, overlooking the blue Danube. Neither money nor talent of architect or artist has been spared in the erection of this truly magnificent building. One room in particular, Hungarian thruout, is of interest to us. On a side wall of that room is a mural painting of Elizabeth—a painting long to be remembered—as she stands there in all her saintly loveliness, with the roses falling from her apron.

Let us turn back now, for an instant, to that which first called attention to the legend. Suppose Professor Lund's choir had sung anything else that morning. Suppose it had been something pretty, tuneful, good, but not the best. Do you think I should have reaped such a harvest? Think what my loss would have been.

Now forever my gratitude is extended that we were given the best. A brief story; it took only a little while to read it, but it has been enriching

my life ever since, and making plain to me much that would otherwise be obscure.

Such is the music that pays dividends.

The National Federation of Musical Clubs is putting forth great energy and many inducements to encourage the production of American opera.

America has its legendary background infinitely rich. Others have drawn attention to what the native music of the Negro may mean to future musical art in America. I pause one brief moment to speak of the Indian legends.

Superb in color, freighted with the loveliest of romances, charged with a mysticism deep and of tremendous import, slowly and surely it is passing away. The young brave refuses, absolutely, to learn the songs and dances of his elders, so eager has he grown to adopt the manners and customs that lie all about him.

Where is the magician, the transformer? Who shall embalm this mystery and beauty to a life beyond life?

Last year Mrs. R. T. Bounim, a full-blooded Sioux, a graduate of the New England Conservatory of Music, and at one time a teacher at the Carlisle Indian School, and Mr. William F. Hansen, of Vernal, Utah, a graduate of one of the foremost music schools of this state, collaborated and produced the "Sun Dance." Mr. Hansen has spent his life near the Indian, and, with much of the ardor of a Scott and an Irving, has gained the good will of the Red Man and wrung from him many of his priceless legends.

This production was received most heartily by the people in and near the Indian reservation, the Indians themselves showing the keenest interest. The issue of April 26 of *Musical America* devotes some space to this venture. Whatever may be the fate of this most laudable undertaking, it is a step in the right direction.

Some day music will make use of this material. When that thing shall be achieved, we shall have opera with stage setting comparable to that in the *Queen of Sheba* and *Aïda;* love stories ravishing and mysterious; accompanied by music weird and wonderful.

Such music shall add only to that long list of compositions that Italy, France, Germany, and Austria, and, in some instances, England and America have given us—music replete, suggestive, ennobling, and exalting. Such music pays dividends.

HINTS TO SUPERVISORS

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The subject assigned to me is not a subject for a paper, but is rather a subject for a free, open-for-all discussion at a round-table meeting, and since this is my idea of the subject, in this manner will I treat it.

Hints to music supervisors, many or few. It is a subject of great magnitude. It may be discussed for hours and then only slightly touched. Hints or suggestions may be given along many lines of our work. I might give a few suggestions as to the music supervisor's literary or scholastic training, but this I shall not do for I assume that this feature presents itself prominently and forcefully to all who would assume the responsible position of training the young. It may be said with great emphasis that a music supervisor should possess at least the rudiments of an English education. He should have more than a passing knowledge of the subjects usually required of the grade teacher, and above all he should be able to express himself in good, clean English sentences, stripped of all verbosity. He should be able to give instruction in a language fit for the children's imitation. It should be of the purest diction and free from slang.

I might take much time in discussing the supervisor's special equipment for the work of giving instruction in music to the children in our public schools. But again it may be assumed that this special teacher has given much study and careful thought to this equipment along this line of schoolroom work. To be ignorant of the verbiage of music—I mean such language as is used in discussing the various phases of the subject—is unpardonable, with all the music literature we have today. You will all agree with me that the supervisor who told the pupils of his high school one morning that they were about to sing a song the general movement of which was *adago*, but not the dagos that work on the railroads and in the mines, was lamentably ignorant or criminally careless. Now, the very book in the hands of that supervisor and his pupils contained the usually accepted pronunciation of all the music terms used in the book.

We might discuss the subject from a pedagogical standpoint, and this is a feature of no little consequence and importance. The cause of much—very much—of the failure in teaching the special subjects in the schoolroom is a lack of a knowledge of pedagogical principles and their application to the teaching of these subjects. Have you studied how to present a subject so as to get the greatest amount of intellectual effort from the children? This is really the keynote to most efficient work with children and should receive closer attention and deeper consideration than it does from supervisors generally.

I might take the time allotted me for this paper in considering the planning and arrangement of a course of study, or an outline of work for

the grade teacher. This is a matter of the utmost importance and one upon which depends the efficient and successful work of the department. The average grade teacher is not a musician, and must be instructed and directed. I might profitably dwell upon this feature of our work, at this point, but will refer to it later in the discussion.

Have I been logical in the naming of the subjects that might profitably be discussed by supervisors? Let us see. Literary training, special training, pedagogical knowledge or teaching principles, and ability to outline, plan, specifically direct. The man or woman who possesses these attributes cannot fail to accomplish wonders with children in the realm of music, if he or she possesses the God-given qualities of aptitude and adaptability.

Now, for a few suggestions. First, have down deep in your hearts an abiding faith in music as a power for good, and that it has immeasurable value from intellectual and cultural standpoints. Therefore, it is a fit subject for schoolroom instruction. Take advantage of every opportunity presented to speak of its power and influence upon the minds and hearts of children, men, and women. Don't sermonize about it. Don't harangue. Just give a simple, plain, practical common-sense talk.

Second, be a general, a leader—not dogmatically but persuasively. Study texts, that is, music literature. Become familiar with the very best of the day. Outline a system of instruction. Prepare specific plans. Issue these in a series of letters. Be specific and clear in all your directions or suggestions. Remember the grade teacher. Take a stand by her side and try to see things and conditions thru her eyes. She will have more confidence in you and will try harder to carry out your plans. Generally she is not a successful teacher of music, but will do fairly well under skillful supervision. Seek out your new teachers early in the year. Learn of their musical equipment. Visit these teachers early and conduct a type lesson for them. Take up the lesson for the day and show just how you would like the instruction to be given. Grade meetings and institutes are very helpful. At such meetings you can go over the work outlined for a month. The teachers will soon become good readers, and will have a fairly good knowledge of music in all its phases.

Third, consider your relations with superintendent, principal, and teachers—especially with the teachers who are to assist you in carrying out your scheme of music instruction. It is assumed that your relations with the superintendent are pleasant and agreeable, for he has recommended you for your position. Never go thru a school building without first meeting the principal and explaining to him just what you have planned to do at this visit. If your visit is for the purpose of testing your eighth grade in sight-singing, tell the principal so and invite him to be with you as much as possible. You all know that generally the principal is quite as short in musical knowledge as many of the teachers, and has but little or no insight into your course of study, outlines, and plans of work. By

encouraging him to visit with you he becomes interested in the work, and familiar with what you are trying to do. Be sympathetic with the grade teacher in what you wish her to do. Express an interest in her work other than the music instruction. Be neither assuming nor presuming. Show by every act and word that you desire to be helpful. As the teacher regards and respects you so will the children.

Fourth, be sure to get acquainted with the studio musicians in your town or city. Explain to them your scheme and plans of instruction. Try to show them how you may be helpful to them, and how they may help you. Show the piano teacher that you can be helpful to her by making the children familiar with the piano keyboard so that they may know where to introduce sharps or flats to make the scale intervals come just right in the various keys, or how to read on the piano keyboard from the staff degrees. Show the piano teacher how such instruction will eliminate the drudgery from her work. You may also be helpful to the teacher of the violin, the cornet, etc. But the work of the music supervisor in the schools is primarily vocal. Therefore, you must not fail to get acquainted with the vocal teachers. You must show them that your work with the children will in no way injure their voices, but that it will rather make them free, full, round, pure, sweet, holy. You must make them understand that you are not using studio methods for developing the voice—that such plans would be destructive of the ends sought. There are so many, many things that may be done by the diplomatic supervisor to secure the sympathy, encouragement, and co-operation of the studio and other local musicians, that I cannot discuss them further now. If there is a musical society in your community, join it, but don't be obtrusive. If there is no such society, suggest to some of the leading musicians the value of such an organization, but be modest about it. Be helpful in all musical matters in your field of labor.

Fifth, now we must secure the encouragement and co-operation of the parents and other school patrons. This may be most successfully done thru the means of exhibitions of the regular schoolroom work; concerts by the children; recitals in which local musicians are requested to participate; contests in sight-singing between classes of the same grade; contests in song-singing between different schools. To all of these affairs extend a spirited invitation to parents and friends. Let everything be done well. Let nothing be done indifferently. Nothing will discredit your work so quickly as carelessly prepared and indifferently executed music programs.

Sixth, encourage the study of musical instruments. Organize orchestras, violin clubs, mandolin clubs, etc. If you have not the time to attend to such organizations, then look for some teacher, or some pupil in the upper grades, who has a good knowledge of music and possesses leadership ability. Give such person power, with the consent of the principal, to put together such material as may be found in the school. (We have eighteen

such organizations in the schools of this city. From these we selected an orchestra of fifty-one pieces for a concert given the 23d of May.)

I have said that the work in music in the schools is primarily vocal, but I believe the time has come for us to make our music instruction more comprehensive, and to that end we should make the children familiar with the various musical instruments. This may be done by giving a short history of the instrument under consideration, explaining its construction, power, and value. Show the difference between such instruments as require an accurate ear and those that may be played by the deaf. Explain the stringing of such instruments as the violin, and if possible show how they are tuned. Explain why the piano is so popular as a musical instrument, and keep before the children of the third, fourth, and fifth grades a drawing of not less than two octaves of the keyboard. Employ every legitimate means to interest the young in the learning of musical instruments.

In this city we have a scheme for arousing interest in the study of musical instruments. It works charmingly. It may be of interest to you. Periodically we take what I call a "musical instrument census." That is, we ascertain, in all grades from the second to the eighth inclusive, how many children are taking, or have taken, lessons on some musical instrument, and the length of time they have given to the study of such instrument. The information thus obtained is interesting and instructive. The first census of this character was taken about eight years ago. The last was taken the last week of school this year. I sought the information from twenty-six schools, but owing to the unusual amount of work imposed upon principals and teachers at this time, only eighteen responded to my request. On the day this census was taken there were present, in the grades named, 8,567 children. Of this number 2,408, or 28.1 per cent, were taking lessons on some musical instrument. The eight schools not reporting would have greatly increased this percentage. I will give a summary of the data obtained:

Piano students, 1,612. Of this number 1,138 were girls and 474 boys. The fifth and sixth grades showed the greatest number of piano students.

Violin students, 486. Of this number there were 337 boys and 149 girls. The greatest number of violin students were found in the fourth and fifth grades.

Cornet, 32. Boys 28, girls 4.

Clarinet, 13 boys.

Cello, 7. Boys 5, girls 2.

Trombone, 5 boys.

Guitar, 33.

Mandolin, 121.

Harp, 5.

There are many interesting features connected with this census. The highest point of the music wave is reached in the fifth and sixth grades. In piano the girl students greatly outnumber the boys. In stringed instruments without frets the boy students outnumber the girls. In the stringed

instruments with frets the girl students outnumber the boys. In wind instruments, both brass and wood, the boys greatly outnumber the girls.

If you would have people know that a thing is worth while, keep it before them—not in a way to harass or offend, but in a way to arouse thoroly to a knowledge of its value and importance. Upon this idea we base our work with the children. At the opening of the schools in the fall I shall make a summary of the reports received in June, and distribute copies to the various schools. This will arouse thought and discussion on the part of principals, teachers, and children, and the result will be increased study of musical instruments.

Now, I have done all I promised to do, and that in a very commonplace way. I have given you a few hints, but I have told you nothing new—nothing that you have not thought of and perhaps exploited to your satisfaction, and to the advantage of the children under your instruction.

Our work is a grand one, and we have not yet entered into the full, radiant glory of this wonderful realm of song. A singing nation is a happy nation. Singing children are happy children. Therefore, let the children sing with their hearts and souls and minds and bodies.

DEPARTMENT OF BUSINESS EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—THOMAS L. BRECHEEN, high school.....Calistoga, Cal.
Vice-President—GEORGE F. ROACH, commercial department, Ogden High School..Ogden, Utah.
Secretary—W. A. SHEAFFER, commercial department, West Division High School
Milwaukee, Wis.

FIRST SESSION—MONDAY FORENOON, JULY 7, 1913

The first meeting of the Department of Business Education was called to order at 9:30 A.M. in the Elks' Club, by President Brecheen.

The first paper was the president's address, entitled "A Review of the Past and a Forecast of the Future of Commercial Training in High Schools."

This was followed by a paper by Frances Effinger-Raymond, Pacific Coast Manager, Gregg Publishing Company, San Francisco, Cal., entitled "If I Were a Teacher of English."

Discussion: R. R. Stuart, head of commercial department, high school, San Jose, Cal.; Earl J. Glade, head of commercial department, Brigham Young University, Provo, Utah; W. S. McKinney, Englewood High School, Chicago, Ill.; Margaret MacVichie, head of commercial department, high school, Salt Lake City, Utah; Thomas L. Brecheen, high school, Calistoga, Cal., and others.

R. R. Stuart, head of commercial department, high school, San Jose, Cal., then read a paper on "Specially Prepared and Incidental Business Training."

Discussion: W. S. McKinney, Englewood High School, Chicago, Ill.; T. L. Brecheen, high school, Calistoga, Cal.; Frances Effinger-Raymond, Gregg Publishing Company, San Francisco, Cal.; and Earl J. Glade, Brigham Young University, Provo, Utah.

The meeting then adjourned.

SECOND SESSION—THURSDAY FORENOON, JULY 10, 1913

The meeting was called to order in the Colonial Theater.

E. Morris Cox, assistant superintendent of city schools, Oakland, Cal., read a paper on "Proper Certification of Commercial Teachers."

This was followed by a paper on "Typewriting" by C. V. Oden, manager of educational department, Underwood Typewriter Company, New York, N.Y.

Five championship typewriting contests were then held under the direction of J. N. Kimball, New York, N.Y., with the following results:

AMERICAN CHAMPIONSHIP (30 Minutes)

Machine	Name	Gross	Errors	Penalty	Net	Words per Minute
Underwood.....	Bessie Friedman	3,653	61	305	3,348	112
Underwood.....	Rose Bloom	3,679	73	365	3,314	110
Underwood.....	Bessie Linsitz	3,542	73	365	3,177	106

WESTERN CHAMPIONSHIP (30 Minutes)

Machine	Name	Gross	Errors	Penalty	Net	Words per Minute
Underwood.....	Bessie Linsitz	3,542	73	365	3,177	106
Underwood.....	Jessie Pinney	2,776	83	415	2,351	79
Underwood.....	Clarence Hill	2,287	32	160	2,127	71
Underwood.....	Don Root	2,462	69	345	2,117	71
Underwood.....	A. S. Crowther	2,257	77	385	1,872	62

UTAH STATE CHAMPIONSHIP (20 Minutes)

Underwood.....	Jessie Pinney	1,869	56	280	1,589	79
Underwood.....	Clarence Hill	1,544	20	100	1,444	72
Underwood.....	Mabel Rhengren	1,494	24	120	1,369	69
Underwood.....	A. S. Crowther	1,566	49	245	1,321	66
Underwood.....	Norma Curtis	1,487	35	175	1,312	66
Remington.....	Emma Anderson	1,741	87	435	1,306	65

UTAH STATE SCHOOL CHAMPIONSHIP (15 Minutes)

Underwood.....	Mabel Rhengren	1,120	19	95	1,025	68
Underwood.....	Inez Woodhurst	1,045	27	135	910	61
Underwood.....	Helen Roberts	1,078	35	175	903	60
Underwood.....	Lorenzo Summerhays	873	42	210	663	44

NATIONAL SCHOOL CHAMPIONSHIP (15 Minutes)

Underwood.....	H. O. Tanner	1,340	19	95	1,245	83
Underwood.....	Mabel Rhengren	1,120	19	95	1,025	68
Underwood.....	G. W. Gaskill	1,379	74	370	1,009	67
Underwood.....	Helen Roberts	1,078	35	175	903	60

The president then appointed the following committees:

COMMITTEE ON NOMINATIONS

W. S. McKinney, Englewood High School, Chicago, Ill.
E. H. Holt, Brigham Young University, Provo, Utah.
W. H. Coppedge, Henagers Business College, Salt Lake City, Utah.

COMMITTEE ON RESOLUTIONS

R. R. Stuart, high school, San Jose, Cal.
Margaret MacVichie, high school, Salt Lake City, Utah.
G. F. Roach, high school, Ogden, Utah.

The meeting then adjourned.

THIRD SESSION—FRIDAY FORENOON, JULY 11, 1913

ROUND-TABLE DISCUSSIONS

The meeting was called to order at 9:30 A.M.

The first feature of the session was a demonstration of stenotypy by Mrs. N. M. Moore, of the Universal Stenotype Company.

This was followed by an Edison dictaphone demonstration by Etta Rich, of the Oregon Short Line Railway Company.

The merits of the dictaphone and the stenotype machines were discussed by J. N. Kimball, E. J. Glade, Frances Effinger-Raymond, Margaret MacVichie, E. H. Holt, G. F. Roach, and T. L. Brecheen.

The Committee on Resolutions then submitted the following resolutions which were adopted:

Resolved, That as commercial teachers we are proud of our vocation, that we are in this work because we want to be and not because we have to be, and that we regret a

tendency on the part of some teachers to enter commercial teaching as a mere stepping-stone to other high-school work.

Resolved, That at future meetings of this section, a cordial and urgent invitation be extended a large number of college and university instructors, bankers, and accountants to offer ten-minute discussions on the articulation of the high-school commercial course and college courses.

WHEREAS, Some of the appointees to the Committee on Research, Standardization, and Correlation of Commercial Subjects have been unable to take part in the work of the committee, therefore, be it

Resolved, That the chairman of said committee be empowered to fill such vacancies; and, further, to invite specialists as associate members, and others of experience as advisory members, to assist in the work of said committee.

The Committee on Nominations submitted the following report:

For *President*—Earl J. Glade, head of commercial department, Brigham Young University, Provo, Utah.

For *Vice-President*—(To be filled later by the president.)

For *Secretary*—Margaret MacVichie, head of commercial department, high school, Salt Lake City, Utah.

The report was unanimously adopted.

The meeting then adjourned.

E. H. HOLT, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

IF I WERE A TEACHER OF ENGLISH

FRANCES EFFINGER-RAYMOND, PACIFIC COAST MANAGER, GREGG PUBLISHING COMPANY, SAN FRANCISCO, CAL.

If I were a teacher of English I should never talk about salesmanship if I had never sold anything; I should never try to teach advertising if I had never written an advertisement; I should refrain from telling young people how to file letters, do effective correspondence, operate the many office appliances, use correct and forceful business language, if I had not done all these things, used all these inventions, and held positions from that of telephone girl and first aid to an injured office, up to and including the manager's desk.

If I did not possess a trunkful of rejected manuscripts, "regretfully returned," and if I had not corrected and edited and written everything, good and bad, from adolescent "Poems on the Grand Passion" and "Death," to mature essays on the "Cost of Living," and well-paid ads for a certain country sausage, and a successful commercial school, I should not try to teach these subjects.

If I were a teacher of English, or of anything, for that matter, I should know my business before I tried to persuade others it was a good one, and a desirable and valuable and remunerative one.

If I were a teacher, again, I should forget all this set program talk about "giving the pupils ideas to express"—I should try to have ideas of my own first, and expression will come—then I should try to train and guide that crude expression and let the ideas alone. I should not hide behind the

shop-talk that English cannot be taught successfully because Johnny and Susie have no "ideas"—they are full of them. Listen to the boys in the vacant lot when a baseball game is at its height; listen to them when they are with their cronies, with persons and things that they understand, and that understand them—those boys have ideas that fight for expression—trust the "Johnnies." And the Susies, ditto—did you ever know a woman who didn't have pronounced and I'll-say-the-last-word-or-die ideas?

I should try to remember, if I were a teacher, again, that we are not to give ideas *per se*, we are to train expression—that is our business—and by training I don't mean grafting on the language of the textbook, but simply the cultivation of the language we are born and bred in, the spraying of the first blossoms and fruit so the final harvest may be free of blemish, sound to the core, and warranted to sell at the highest market price.

I have stood at the brink of Niagara Falls many different times, and by the side of tourists from all around the world, and I have heard cultured, poetic, sentimental, and soulless superlatives that even a Turk-Baker could not criticize from the standpoint of correct English; but these same well-clothed ideas lacked half the force of what I heard an enraptured-faced, tender-voiced little bride say to her proud young man. Looking into his responsive eyes she cried, in a tone of reverent prayer, "O, ain't it fierce!" We all breathed an "Amen" of understanding. Didn't she have ideas? Didn't she have expression?

Could a teacher who has no knowledge of reading or numbers, of shorthand or bookkeeping, devise suitable methods for presenting these subjects? Surely the teacher cannot teach what he does not know, be the subject English or astronomy.

Originality, individuality, attractive personality, courage, confidence, ease of manner, firmness, tact, and initiative—all these are good, better, best—but how about adding a thoro knowledge of business? of office training?

There has been a marked step forward in practical co-operation between school authorities and business men, between the man who can say "what should be done," and the man whose business it is to say "how it shall be done." In my mind there is an important element in the successful operation of this whole scheme which has been overlooked; namely, a corps of teachers who by their own associations with business can bring into the classroom the spirit and atmosphere of the business world. I am convinced that a commercial teacher cannot shut himself away from all outside interests and do effective work. It is impossible for him to bring the atmosphere of a business office into his classroom unless he keeps in touch with actual business and business men. It is impossible for him to prepare pupils for business unless he knows what the demands of the business office are; the commercial teacher cannot do his best work unless he keeps abreast of the changes that are constantly taking place in business and business methods.

How can a teacher be positive, be magnetic, be dynamic, when he is full of a negative, prepared, detached textbook and naught else? There are many ways of securing this training, this education. Emerson got his by loitering in a library, but Emerson was not a business man; Newton got his by observing an apple, but Newton didn't look at his apple from the same viewpoint as we do, did he? Lincoln got his by observing everything, and while we revere that great and good man, he was not a business man; Roosevelt and Hetty Green and Rockefeller got theirs by hustle, by co-operation, by combinations, by compromises, by watching men and markets —and they are business personified.

Some teachers have an incommunicable communion with business, and our schools today are largely what they have made them.

Who teaches the English in your school? Confess, is it not your assistant bookkeeping teacher? or your student-teacher of stenography? or the janitor? Isn't it usually left-over work to be taken up by the teacher who isn't too busy, or who uses it to fill in his time? I have known managers to demand, over and over again, that their bookkeeping or stenographic or penmanship teacher should be able to handle the English classes, and I have never known a case where the individual applicant, or the agency who acts for the manager unable to choose his own teachers, has failed to state that "sure, he can teach English all right" (and generally "all right" is misspelled).

English isn't receiving its full share of attention in any schools unless we except the English departments in our colleges and universities. If there is a class to be left to the tender mercies of a subordinate, or to a heart-to-heart talk from the school principal, it is the English class. It catches all the advice of the day, it is the place where announcements are made, and its period is the one always appropriated for the class meetings, etc.

If the teacher is attractive, if the subject-matter is vital, if the text-book is current events, there is no difficulty in arousing and holding the attention, in awakening and locating the interest of the students. The teacher, however, must be efficient, not sentimental; co-operative, not individualistic; professional and dignified.

Don't mistake me. If I were a teacher of business English, I should not go to the other extreme and believe that it is enough that our pupils talk and make themselves understood, no matter how poorly their sentences are constructed. They should learn the necessity of good English. They should be taught to conform to the rules of grammar and the dictates of good usage. Our language has a grammar, even if we are beginning to shy at that word—otherwise it would not be a language.

To send forth well-equipped students demands teachers who themselves can do what they try to teach others. Textbooks will always be needed but they do not take the place of the real teacher, and they quickly drop out of use when the pupil enters the battle of business. Business English is a

subject-matter which is not fixed, but has a constantly changing material, and any textbook is absolutely valueless unless taught by one who knows more than the book. I know that in many of our schools English is taught by teachers who are not only uneducated but inexperienced.

If I were a teacher, again, I should use the textbook as a reference book. I should read it over carefully in class, and have the students read it aloud. If the lesson is not learned, the reading is careless. Then read it again and get the point. I should take a lesson from my foreign students: Observe a Swede, German, Dane, Frenchman, Spaniard, or Greek in his study of his own language—he must know his grammar first. He does know it.

If I were a teacher, again, I should not look for results to the neglect of the means. I should try to teach an English that will develop in my students the power of effective oral and written expression; that will inspire, will urge, will lead them to become masters of their native tongue. I should try to give them a healthful liking for books and to create in them a habit of using them. There is no danger of the instructor having too much culture or too much business instinct; he may have too much learning. An authority in English is often a very poor teacher; the best instructor is the man who has been world-educated, not book-crammed. The best of instruction is the ultimate power of the pupil over himself and over his environment. The spoken work, the written work, these are familiar tools. The language one uses is always that which he hears and reads, and you and I make language; our culture, our eagerness to develop this power in ourselves and in others, will measure its advancement. Never mind the results; language is a means, not an end, and the results are sure to repay the world even if the eager, earnest, watchful, determined teacher should prove a vicarious sacrifice.

You and I may not be scholars in the sense that Emerson and Gladstone were; we may never have had a collegiate, academic, or high-school education, but if we use words which convey the business idea perfectly we are inevitably true to the best scholarship.

Correctness of spelling, grammar, and punctuation is absolutely essential to enable a business letter or advertisement to do its work of conveying a business idea perfectly. The methods that business men have found effective in studying English for their own immediate use should be the English we study and we teach. Every business demands scholarship; every business demands practical, effective teaching of English for business purposes.

If I were a teacher I should take the trouble to learn to spell, to use capitals, to intersperse my sentences with commas, and to separate them by periods and colons; to obtain facility in the vernacular of the business world. Language is the dress of thought, and this age, like every other, makes its first estimate on the basis of appearances. The man whose clothes seem strangers to iron and sponge, and whose shoes are guiltless of polish or brush,

may be indispensable to his employer, but he isn't the kind of teacher I should select for my girl or your boy. The girl attired in a semiworn reception gown and French heel shoes, and adorned with numerous cheap rings, bracelets, lockets, and pins, isn't irrevocably debarred from being a valuable stenographer—but I don't want my girl to start with such a handicap. Then there is the girl of the iridescent hair—but words fail me! What has this to do with business English? Did you ever hear a bleached-hair conversation by a semi-demi-brunette? Well, I'm writing some and you may read them some day.

Perhaps if there is a study worth while for its own sake it is English, but neither the best writers nor the most entertaining talkers are those whose grammar is ever before them. We are interested in those who have something different to say, a new point of view to present, gained perhaps from books or, infinitely better, from first-hand experience. A person whose mind is shut up to all but one approach can furnish very few live ideas.

"Just my creed," says the enthusiast, "I have always disapproved of all this formal, artificial English teaching. Give the pupils ideas and the rest will take care of itself." Avoiding the Scylla of formalism they are wrecked upon the Charybdis of incoherency. As well say, give your children a notion of music and they will sing and play naturally. This is a pleasing theory but it will not work any better on English than on music. While the great writers did not construct paragraphs by rule, they spent years in perfecting their art. If the musician rises superior to five-finger exercises, it is only because he has mastered the technique of his art and can use it to express his ideas. Rossetti was a failure as a painter, for tho he possessed imagination and sense of color he had no skill as a draughtsman, and he would not take the trouble to learn the mechanics of art. This same fault spoils much of his writing. No abundance of words will atone for want of ideas, and no idea, Whitman to the contrary notwithstanding, but is worthy of all possible trouble to find the proper words to express it.

Suppose that we never intend to write anything more literary than letters—of what importance is all this to us? Most of us talk more or less, and while the public may read or not, as it chooses, somebody is usually obliged to listen when we talk. Stevenson says there can be no fairer ambition than to excel in conversation. Perhaps this attainment isn't within the reach of everybody; but surely, by taking time and doing some thinking, we may make our language something more than a mismated association of adjectives and nouns joined to a verb served to express a dozen related ideas —a paragraph whose ideas are without sequence and are loosely hung together by the first connective we could lay hands on.

There is this objection, that if we are always thinking of our language we won't have anything to say. Probably the intellectual loss to the world wouldn't be irreparable if this were true, but it isn't. The exercise of the

power of speech is like that of any other faculty, and what is done awkwardly and self-consciously at first soon becomes mechanical.

To repeat, I am firmly convinced in my own mind that the reason the commercial schools are not successful in their business English course is not because the subject cannot be made interesting; is not because it is not absolutely essential; is not because the students do not "take" to it, but for the reason that the commercial schools do not teach business English. I believe to do this many things are necessary, the most vital of which is: To get a Teacher.

To get an English teacher who can teach English, and finally, my brethren, to get a teacher of English who can teach business English. Business English requires a teacher, not a lecturer—a loose-leaf ledger system and not a textbook course of instruction; it is a utilitarian, a vocational subject, not a cultural, an occupational pursuit.

Oh, it is great to be a teacher. It is wonderful to be a teacher. A true teacher can never grow old. A true teacher can never die except the death be within. Think what it means! Your whole life is spent with Youth: aggressive, progressive, suggestive Youth. Think what it means to throw your greatness round their incompleteness, round their restlessness, your rest! It is a divine privilege to be a teacher! A perpetual benediction of Youth to be a teacher!

SPECIALLY PREPARED AND INCIDENTAL BUSINESS TRAINING

R. R. STUART, HEAD OF COMMERCIAL DEPARTMENT, HIGH SCHOOL, SAN JOSE, CAL.

I think it is a perfectly obvious fact that one of the best places to learn business is in the business office, just as a very good place to learn farming is on the farm; lumbering, in the woods; mining, in the mines, etc.

Of course, theory and practice must go hand in hand. Practice by itself is misleading and confusing; theory without practice becomes uninteresting and tiresome.

Business training, so far as the high-school teacher is concerned, may be divided into two general classes: first, specially prepared, and second, incidental. Under the first of these would be included all budgets, systems, and schemes the object of which is to arrange make-believe transactions, assignments, etc., under as nearly real conditions as possible.

SPECIALLY PREPARED BUSINESS TRAINING

In San Jose we have our work so arranged that a year is spent on the elementary part of a subject, five months on the specially prepared office practice, and the remaining five months of the course on incidental business practice.

Considering the fact that there are so many interesting and important advantages in office practice, which will, no doubt, be considered by the next speaker, I shall mention only one, namely, the training to write accurately and rapidly negotiable instruments and all forms of commercial paper.

Ability in the preparation of negotiable instruments.—In a semi-theory system of bookkeeping, a student is requested to write a check on a fictitious bank account, to pay a fictitious individual from whom he secures a fictitious bill of merchandise. He is instructed to prepare the check following Rule 723, Form 639, and file it in a package marked "cash paid out," "outgoing vouchers," or something else. I have had occasion in examining one of these systems to discover that in one or two instances the student was instructed to place the check in two different envelopes at the same time. In fact, there is danger of there being so much make-believe, that the student comes to the conclusion that the whole proposition is fiction.

Again, unless the teacher has the time to examine very carefully every paper which the student prepares, no one ever sees the check again. I contend that for the average teacher it is entirely out of the question to examine every business paper which is prepared by his students. Still, there must be some means to check this work and to check it in an effective, progressive, and businesslike manner. Office practice offers this desired opportunity.

Let me trace, for convenience, the history of an ordinary check in our department. A student, John Smith, issues this check against a definite account which he has with the High School National Bank. He makes the check payable to a certain business house, and actually delivers the check to the sales clerk of that office in return for a bill of merchandise. Now the sales clerk is an advanced student and one of his important duties is to examine carefully every paper he receives. If there is any defect whatever, he refuses to accept the check and the student on the floor is obliged to rewrite the paper. A little experience of this kind is bound to develop accuracy, neatness, and speed in the execution of every form which he prepares.

Let us suppose, however, some hidden flaw escapes the notice of the sales clerk. Each day the manager of the office prepares a report of his business for the teacher in charge of the business exchange and deposits at the bank all cash on hand. The honor and responsibility of the office depends upon the manager. His advancement in the department and his chances for a position on the outside are dependent upon the character of his work as manager. Nine cases in ten he detects the error. At the bank, the check is again carefully scrutinized by the receiving teller—an advanced student selected for the position because of his special ability in detecting errors of this nature. From the receiving teller, the check goes to the bookkeeper and is by him entered as in actual business. This check will

eventually return to John Smith, thus passing thru the hands of from four to six students during its life's history.

Aside from the students who must have seen and examined the check, the teacher finds as many opportunities as before.

What is true of checks is likewise true of every business form which the student prepares. I consider that this sort of training is absolutely essential. We have no right to graduate a student from our commercial courses who has not had a lot of practical experience of this nature.

INCIDENTAL BUSINESS TRAINING

It seems to me, however, the greatest opportunity for business training may be found in the special conditions which govern each particular locality. This training may be termed incidental, for usually the business practice is merely an important by-product.

The commercial museum.—In San Jose, we have found the commercial museum one of the institutions which presents an excellent chance to develop this kind of training. We started the museum a year ago. Our first exhibit consisted of eleven ten-ounce bottles of crude and refined oils furnished by the Standard Oil Company. From that small beginning, the proposition has developed until, at the present time, we have more than fifteen hundred exhibits occupying a floor space of over a thousand square feet. Yet these exhibits have been secured and the museum operated without a cent of expense to our board of education other than the bare cost of maintaining the rooms.

We have at the present time collections from nearly every part of the world. They range from crude Para rubber, the cocoa bean, and a magnificent collection of spices from the tropics, to the grains and grasses of northern Alberta and the minerals of Alaska. The Hawaiian Islands have furnished us an excellent collection of woods and lava, while scores of manufacturing firms thruout the United States have sent us complete exhibits of their particular products.

For the commercial library which is used in connection with the museum, we have secured thousands of booklets, pamphlets, maps, lantern slides, postcards, and other information from chambers of commerce, industrial concerns, and railway and government officials.

Of course, the primary object in securing this material is for its invaluable assistance in teaching industrial and economic geography. Were that the subject of my paper, I should consider the particular manner by which this material is made use of by our students in geography.

It is because of its incidental business training value, however, that I mention it in this connection. A large percentage of this material is secured as a direct result of courteous, carefully written requests. Our classes in commercial English prepare and study the composition of all requests and compare and criticize all replies. The training and experience in preparing

letters which will bring results could hardly be obtained in any other manner. The criterion of excellence is no longer the arbitrary opinion of the teacher, but a public—discriminating, no doubt, but impersonal and impartial.

Next the classes in shorthand and typing secure an excellent training in the actual execution of these ideas by writing the hundreds of letters which we send out each semester.

When the material is received, our classes in advertising and salesmanship make a particular study of each collection from the viewpoint of the advertiser. The material is then turned over to a committee that is empowered to arrange the exhibit in the museum. The printed material is immediately delivered to our classes in filing and indexing and is here carefully arranged, classified, indexed and cross-indexed, and placed in the mammoth files which have been provided for this purpose.

In other words, we are attempting to link every phase of our commercial work securely together by a common interest in our commercial museum. The incidental business training thus secured is not only invaluable, but is feasible in almost any school, since the plan can be developed on any scale desired.

The junior chamber of commerce.—The junior chamber of commerce is another feature which offers an incidental business training. Last January a score of our boys got together for the purpose of organizing such an institution. Other bodies have used the name, but their functions have usually been negative: "formed for the purpose of keeping the youngsters out of mischief," was the way a publicity man in New York put it. These fellows didn't want a kindergarten proposition—they wanted to do real publicity work, or they didn't want to organize.

Conditions were particularly favorable for the organization of such a body—a valley unsurpassed on the entire western coast in fertility and environment; just far enough inland to avoid the disagreeable fogs which waft their chilly forms about the Golden Gate and yet near enough the coast to escape the scorching blasts which kill off the Japs in such profusion in the San Joaquin Valley; land and water transportation facilities the very best; the world's markets at our very door, and yet, despite all these facts, a citizenship which is just beginning to awake to the possibilities and opportunities of the Santa Clara Valley. Of course, the primary object of the organization is to take part in the waking-up process. Its incidental business training value, however, cannot be overlooked.

The work of the organization is carried on thru a dozen or more committees, among which may be mentioned the following: publication, historical, geographical, exhibits, advertising, program, and reception.

One of the first efforts of the publication committee was to issue a publicity number of our high-school weekly. The paper was twice its ordinary size and four thousand copies were mailed to all parts of the United States

and Canada. (A few copies of this issue were then distributed.) To prepare even the crude publicity articles which this paper contains requires, I think you will admit, considerable study on the part of high-school boys. This committee is planning to issue a more pretentious booklet during the fall.

Our historical committee began the important work of locating points of historical value thruout the valley. Here again, we are particularly fortunate, inasmuch as Pueblo San Jose de Guadalupe was a flourishing village about the time Washington was inaugurated president, and there still remain many landmarks of those early days. Next fall, the junior chamber of commerce will have prepared, in our arts crafts department, suitable bronze tablets which will be placed with appropriate exercises to commemorate and mark these historic events and places.

Our geographical committee is securing and arranging information concerning crops, weather conditions, soil analyses, labor conditions, etc., thruout the valley. This information is of real worth to the investor and home-seeker. The committee, while securing these statistics, is working under the supervision and with the co-operation of the California Development Board of San Francisco.

These few suggestions may have given an idea of the work our junior chamber of commerce is doing. It seems to me that in securing knowledge of one's own section, in co-operating with one's fellows in projects of civic improvement, in meeting men and working with men, a business training is offered the boy that will be an invaluable asset during his entire life.

The high-school bank.—The high-school bank is another institution which, tho by no means novel, is being used to develop this incidental business training. Our bank was organized the eleventh day of last April. During the three months since that time, over five thousand dollars has been deposited in the savings' department and nearly one-half of this amount will remain on deposit during the summer vacation. The bank is so arranged that students take complete charge of the work. These students, with a faculty member who is president, are under surety bonds and are obliged to make a very strict accounting of all money received and paid out.

Next fall a commercial department will be added to the bank and the students encouraged to start checking accounts. We shall further extend the banking system to include every grade school in the city. This extension alone will furnish work for nearly a dozen advanced students.

The advantages of a high-school bank are manifold: it develops a habit of saving among the students, it trains those who operate the bank in the methods and responsibilities of actual business, its checking accounts school in accuracy and methodical habits, and finally, it affords an excellent financial center which benefits every activity and student in the institution.

The travel school.—Another proposition which ought to be developed by commercial departments is the travel school. By this, I mean regular

annual excursions to points of commercial and industrial importance in one's particular section of the country. These trips should range in length from a month to ten weeks and should accommodate from twenty-five to thirty Senior boys. To make the proposition clearer, I will suggest a proposed itinerary we are working on for our school.

At least three special cars would be required, one of which should contain exhibits and complete information regarding our city and valley. A general outline of the trip itself would be about as follows: from San Jose to Vancouver, B.C., via San Francisco, Portland, Tacoma, Seattle, and Victoria; from Vancouver to Calgary; from Calgary to Lethbridge and back thru the Crow's Nest Pass to Spokane; from Spokane to Salt Lake City via Walla Walla, Pendleton, and Pocatello; and from Salt Lake City to southern California and return to San Jose. Such a trip would take one thru the six great western states and the provinces of British Columbia and Alberta. It would include nearly every industrial center of importance in the West.

First-hand investigations, therefore, could be made of almost every industry. Its farms, its mines, its fisheries, its woods, its shipping and transportation facilities, the character of its citizenship—all these could be studied at close range. Harbor improvements, irrigation and reclamation projects, and conservation problems might be investigated. The single tax, municipal ownership of public utilities, and many other economic questions could be studied to advantage, particularly while the party was on Canadian soil. At least four hours each day should be spent in definite purposeful investigations, and, incidentally, the boys should be given credit for this time on the same basis as regular school work.

I imagine I hear you say: "Yes, but who will finance such a proposition?" In reply, I would suggest what we all know, i.e., that millions of dollars are spent each year in publicity work thruout the country. Might not such trips be of considerable publicity value, both to the home section and to every section visited? There is no more economical way in which a community could advertise its opportunities than to demonstrate them to a score or more of bright, active young fellows—the direct representatives of a community of fifty thousand. I need hardly suggest that the boys themselves should advertise their home community to an even greater extent.

Work of this nature would surely be business practice of a superior type. Back from a trip of this kind, the boys would bring ideas from every part of the West. Many of these could be put into operation in our own valley. Some of the boys would locate later on in the various sections visited. In general, the trips could not but promote the mutual interests of all the communities and lead to a better understanding of the wonderful possibilities of the entire West. Indeed, I am bound to believe that a ten weeks' trip, rightly conducted, would mean more to a high-school graduate than a whole year of college work.

What I have said regarding our attempts in San Jose could be duplicated for scores of other schools thruout the land. Commercial teachers are awakening to a realization that, not in textbooks only, but in business—in life, itself—we shall find the greatest lessons for our boys and girls. Some people believe that the commercial course deals merely with the material. They spurn it because it is a "bread-and-butter" proposition. I want to say to these people that they are greatly mistaken. We are not commercial teachers because we must be, but because we want to be. We are proud to be able to teach these subjects and in doing so we feel we have as much of a God-given mission as the teacher of any other subject. The great object of our work is efficiency, and efficiency means prominence, advancements, responsibilities. It often means much more: health, virtue, life itself depends, ofttimes, upon the ability to do well the work one has to do. That is our mission, and only the slums of a great city and the outcasts of eternity realize how great it is.

TYPEWRITING

C. V. ODEN, MANAGER OF EDUCATIONAL DEPARTMENT, UNDERWOOD TYPEWRITER COMPANY, NEW YORK, N.Y.

The subject of typewriting should appeal not only to every educator, but to every business man as well, because the typewriter has doubtless contributed more to the wonderful commercial progress in the world's work, during the last quarter of a century, than any other modern office device. In fact, it has made most of the other office devices not only possible, but necessary. In support of this statement, I believe you will agree with me when I say that the removal of the typewriter from the business world for just one week would send millions into idleness, bring a protest from every quarter of the civilized globe, and effectually block twentieth-century business progress.

The typewriter has a paradoxical effect on business. It lessens labor, at the same time increases it. It has taken the place of the pen in business correspondence, yet good penmanship was never in greater demand than it is today. It magnifies mistakes in composition, spelling, capitalization, and punctuation, and as a result leads to their correction, hence, its value cannot be overestimated from whatever angle it may be considered.

Authentic records show that the germ of typewriter genius first manifested itself just about two hundred years ago, when, in the year 1714, Henry Mills, an English engineer, patented a writing machine, which he said he had "brought to perfection at great pains and expense"; yet it was more than a century and a half thereafter before the first practical typewriter was built, and the evolution of genius and public opinion began to get together.

There are four fundamental features in the construction of a typewriter, to which all others are supplemental: first, the type bar, its connection and action, which makes the impression; second, the escapement, which permits the carriage to go forward, thus providing new space for each succeeding character; third, the carriage return, to begin a new line, at the same time automatically feeding the paper to a uniform line space; fourth, and last, the ribbon movement, the means by which the coloring matter for the impressions is properly distributed.

It is said, and it is true, that inventors first design the type bar, arrange its connections, adjust its action, and manufacturers build the machine around it. And for this reason the type bar is rightly termed the heart and soul of the typewriter. Therefore upon the simplicity, strength, and action of the type bar depend the speed, accuracy, and stability of the machine, the combined qualities which make it most valuable.

There are certain laws of nature with which you are familiar and with which manufacturers must conform in order to produce the best results. These are action, reaction, gravitation, and friction. The action of the type bar toward the printing point is no more essential than its return. In fact the value of a typewriter for speed and accuracy does not consist so much in the forward action of the type bar as it does in its reaction or return. This is for the reason that the forward action depends upon the skill and force applied by the operator, while the reaction or return is wholly the result of the principle embodied in the construction of the machine. The type bar must return instantly in order to prevent clashing of the type, and the escapement must take place immediately after the impression has been made to prevent the piling of letters—in other words, when the type bar, in its return, is at the shortest possible distance from the printing point.

Gravitation aids materially in the return of the type bars and the action of the carriage, and is therefore an important feature to be considered in the operation of a typewriter.

Friction is desirable, as well as undesirable. For example, friction should be eliminated from the active working parts of a type bar combination, the escapement and movement of the carriage, as much as possible, but when the tabulator is used, friction is necessary to prevent the jamming and jarring of the carriage in jumping from one point to another.

It will be understood that the type bar movement and the carriage escapement are so closely associated in the operation of the machine that there must be absolute harmony of action between the two. The escapement of all type bar typewriters is controlled by the universal bar, and there are only three methods by which universal bars are operated: first, by the finger-key lever beneath the machine; this causes a division of power, lost motion, and greater liability of misadjustment; second, by the connecting link between the finger-key lever and the type bar; by this

method there is also a division of power and lost motion in operating the type bar and the universal bar; third, the type bar comes in direct contact with the universal bar, and there can be no lost motion, lack of harmony in their operation, or liability of misadjustment. Divided power is less effective, while concentration of force always produces the best results.

The touch of the finger-key, which actuates the type bar, the carriage, and the ribbon movement, is of the most vital importance, and a light, loose, yielding touch is deceptive and is not desirable. It is not conducive to the best results, because it often means simply taking up the slack or lost motion in the type bar and universal bar action. The touch should be short, sharp, and snappy, quick to act and react; and to obtain the most satisfactory touch, each key should be individually adjustable to suit any finger of any operator. This feature facilitates touch typewriting—the only method by which the best results can be realized—more than any other feature of the machine.

The purpose of the typewriter is speed and accuracy. It is the response to a natural demand for more and better work. It is a forward stride in the eternal march of progress, and while its original scope of usefulness was limited to correspondence, it is now equally adapted to all kinds and classes of work—tabulating, billing, adding, bookkeeping, etc.—in fact there is a typewriter for every commercial requirement.

Miss Wilson, holder of the international typewriting record, 117 net words a minute, maintained for one hour, struck the keys more than 38,000 times during the hour, not deducting the time consumed in the insertion of paper, the reverse of the carriage, the use of the shift key for capitals, the turning of the pages of the copy, etc. This means that she struck the keys more than $10\frac{1}{2}$ strokes a second for 3,600 consecutive seconds. I relate this fact and desire to direct your attention to it as forcibly as possible, because it illustrates the possibilities of touch typewriting.

The value of typewriting has not heretofore been properly appreciated, but I believe business educators are beginning to realize the fact that the transcript, or the typewritten copy of his dictation, is of greater importance than note-taking or shorthand, for the reason that the business man is not responsible for the possible inaccuracies in shorthand, but when he attaches his signature to the typewritten copy of his dictation, he assumes all responsibility for every statement, blur, blot, and blunder contained therein, except he be of the doubtful class who signs a letter and stamps it "dictated but not read." Such a man reflects discredit both on himself and on his stenographer, by trying to sidestep the responsibility which his signature should convey. The taking of notes concerns the stenographer only, while the transcript becomes a personal representative of the man whose signature it bears, and a record of his business transactions. Too much attention, therefore, cannot be given to correct typewriting.

The student should not only be educated to write by the touch method, but he should understand the necessity of striking the keys sharply and getting away instantly, because the machine cannot respond until it is released. He should also be taught to hold his hands as close to the keyboard as possible, because time is lost in lifting the hands too far from the keyboard, and mistakes are made in getting them back. The position of the typist at the machine should be erect, and the chair adjusted so that his feet set squarely and firmly on the floor, thus supporting and balancing the body. When these things have been taught, it is the duty of the teacher to instil into the minds of the student the necessity of constant, continued practice, because the world's fastest typists have not acquired their speed and accuracy by wishing, but by working.

It is said that as a man thinketh in his heart, so is he, but unfortunately too many men, including many business educators, allow the current of thought between the mind and heart to be intercepted by the pocketbook, and dollars rather than conviction dominate their decision. In other words, they are influenced by price rather than merit, and I want to state clearly my personal conviction with reference to this matter. Men who are in business for themselves have the right to consider price rather than merit if they desire, because their acts are personal and their losses their own. But this is not true with the teacher. His acts are not personal, for they may influence the student's work, either for good or bad, thru the whole course of his future career. You are bending the twig.

The first consideration of a teacher should be the welfare of his students. He should not only give them the best of his ability as an instructor, but he should give them the benefit of his honest conviction in selecting teachers, methods, and materials. If you are not doing this, you are doing both yourself and your students an injustice.

You should not introduce ideas into your school, or employ a corps of teachers, or buy an equipment of typewriters or other materials, merely because they are cheap, but let it be because they are good—the best, according to your own judgment—and you should not allow others to think for you. Investigate for yourself and exert your individuality. Do not accept a principle that is covered with moss, mold, or mildew. Don't spend your money at the "bargain counter," lest you find some defect in your purchase. There is a reason for such a "counter." Don't permit price to be paramount to principle. Remember that character is more valuable than reputation, and that name is not always synonymous with fame.

DEPARTMENT OF CHILD HYGIENE

SECRETARY'S MINUTES

OFFICERS

President—W. A. Jessup, director, School of Education, State University of Iowa
Iowa City, Iowa
Vice-President—F. B. Dresslar, specialist in school hygiene, Bureau of Education
Washington, D.C.
Secretary—Anna I. Jenkins, director of Roosevelt Kindergartens.....Pasadena, Cal.

FIRST SESSION—Monday Forenoon, July 7, 1913

Thru the courtesy of the National Council of Education, the Department of Child Hygiene met in joint session with the Council in Barratt Hall. The papers and discussions of the morning will be found in the proceedings of the Council.

At the close of the session this department joined the Council in a resolution requesting the proper authorities to place the sum of $1,500 at the disposal of the Joint Committee on Health Problems in Education, as this committee is continued for further work.

The chairman of the Department of Child Hygiene announced the appointment of the following Committee on Nominations:

Leonard P. Ayres, Russell Sage Foundation, New York, N.Y.
J. G. Collicott, superintendent of schools, Indianapolis, Ind.
A. O. Hugart, Coffeyville, Kans.

The meeting then adjourned.

SECOND SESSION—Wednesday Forenoon, July 9, 1913

The meeting was called to order by President Jessup at 9:30 A.M., in the Lafayette School Assembly Hall.

The subjects presented for consideration at this session were: "The Special Problems of School Hygiene in Rural Schools," by Thomas D. Wood, M.D., professor of physical education, Columbia University, New York, N.Y.; and "Sex Instruction," by T. W. Galloway, James Millikin University, Decatur, Ill. (For Dr. Wood's paper see papers of National Council of Education.)

The discussion following Dr. Wood's address was opened by Linnaeus N. Hines, superintendent of schools, Crawfordsville, Ind. W. H. Smiley, superintendent of schools, Denver, Colo., and R. W. Corwin, M.D., Pueblo, Colo., also took part.

The discussion of Mr. Galloway's paper was opened by Martha B. Jennings, dean of girls, Salt Lake City High School, Salt Lake City, Utah, who was followed by R. W. Corwin, M.D., Pueblo, Colo.; Mary Elizabeth Bates, M.D., Denver, Colo.; Dr. Beatty, head of Utah State Board of Health; Anna I. Jenkins, state chairman of kindergartens, California Congress of Mothers, Pasadena, Cal., and others.

Upon motion of Superintendent Smiley, the following resolution was unanimously adopted:

Resolved, That it is the belief of the Department of Child Hygiene that the rules of the Indiana State Board of Health for insuring healthful conditions in schools, as quoted by Superintendent Hines, bear such stamp of careful preparation in the light of the best scientific knowledge of healthful conditions in school buildings and their surroundings,

that we request our United States Commissioner of Education to consider whether they are not worthy of special publication by our government, that they may be at the service of all schools in all states.

The meeting then adjourned.

THIRD SESSION—THURSDAY AFTERNOON, JULY 10, 1913

The meeting was called to order by President Jessup at 2:30 P.M.

The topic under consideration was "The Administration of Health Departments."

Under this topic the following subjects were presented for consideration: "The Administration of Educational Hygiene," by Louis W. Rapeer, Department of Psychology and Education, New York Training School for Teachers, New York, N.Y.; "The Administration of Health Departments—The Colorado Plan," by R. W. Corwin, M.D., Pueblo, Colo., professor of surgery, University of Colorado; and "Child Hygiene and the Parent," by Anna I. Jenkins, director of Roosevelt Kindergartens, Pasadena, Cal.

Discussion: Martha B. Jennings, Salt Lake City, Utah; Mary Elizabeth Bates, M.D., Denver, Colo.; Susan M. Dorsey, assistant superintendent of schools, Los Angeles, Cal.; M. P. E. Groszmann, educational director, National Association for the Study and Education of Exceptional Children, Plainfield, N.J.; and R. W. Corwin, M.D., Pueblo, Colo.

The report of the Committee on Nominations was adopted and the following persons elected as officers for the coming year:

For *President*—W. C. Bagley, professor of education, University of Illinois, Urbana, Ill.

For *Vice-President*—Helen C. Putnam, M.D , Providence, R.I.

For *Secretary*—Linnaeus N. Hines, superintendent of schools, Crawfordsville, Ind.

The meeting adjourned.

ANNA IRENE JENKINS, *Secretary*

PAPERS AND DISCUSSIONS

THE SPECIAL PROBLEMS OF SCHOOL HYGIENE IN RURAL SCHOOLS

THOMAS D. WOOD, M.D., PROFESSOR OF PHYSICAL EDUCATION, COLUMBIA UNIVERSITY, NEW YORK, N.Y.

In discussing this problem, Dr. Wood followed the lines of his report as chairman of the Committee on Health Problems in Education, which report will be found with the papers of the National Council of Education.

DISCUSSION

LINNAEUS N. HINES, superintendent of schools, Crawfordsville, Ind.—The problems of school hygiene in rural as well as urban schools may be classified and stated as follows:

1. Securing a teaching body that knows what it ought to know of school hygiene and that is willing to apply and enforce all the laws of correct living in the schoolroom.

2. Developing in the community adjacent to and supporting the individual school an understanding of and sympathy with the attempts of the school authorities to secure proper living conditions in and about the school building.

3. Developing on the part of those that control the school finances a willingness to spend whatever money is necessary to secure proper arrangements in regard to heating, lighting, and other things that go toward making up proper surroundings for the pupils.

4. The selection of the right kind of sites for school buildings—sites that are elevated, well drained, and big enough to serve the immediate and remote needs of the pupils in their school capacity.

5. The securing of a supply of water that is free from all impurities and that may be furnished fresh to the pupils at all times.

6. The location of outhouses and toilet-room conveniences so that neither the air nor the water about the school will be contaminated and no offense against the finest sensibilities will be committed.

7. The securing of schoolrooms with the proper amount of floor space and air space per pupil.

8. The proper lighting of schoolrooms.

9. The proper heating of schoolrooms and with this the introduction and distribution of the proper amount of air free from impurities of all kinds.

10. The providing of clean, well-ventilated extra rooms where the pupils and teachers may eat their lunches.

11. The providing of proper and adjustable seats and desks for the pupils so that no bodily ailments may come from the pupils' having to sit in cramped and unnatural positions.

12. The making of the school so nearly perfect in a sanitary way and so attractive that the pupils will want their homes to be like the school.

13. The teaching of all the laws of health and proper living so that the children from infancy may know how to conserve their health.

What is needed first of all in the rural school is proper financial and living conditions so that teachers may devote their lives to the rural-school problem and not be placed as they are now so that they must get out of the teaching business altogether or teach in the cities in order to save a little. The rural teacher ought to have a well-kept and comfortable home near his school, and his tenure of his position and his pay ought to be such that he can afford to devote his life for a period of years to the school in hand. He will then go to the problem of the proper living conditions for his pupils in a different way and a different spirit. He may, perhaps, be inspired to make his school the model for all the country round in regard to sanitary and health-giving conditions. He can afford to prepare himself better for his work. In short, the key to the whole problem lies in the character and quality of the teacher. If he is the right sort, he can convert those that control the school finances to the idea that the pupils ought to have their health conserved. He can influence his community so that it will want what is proper and best. He can work revolution where all was stagnation and indifference. There are country teachers here and there that are doing these things but more are needed. The teacher can make the school in sanitary as well as other matters. That better day is coming when all these things will come to pass!

Another important phase of the question in hand is the appointment of competent and energetic township or county health officers and medical examiners. Give such officials sufficient power and they will accomplish wonders in even the slowest communities. It is true that they will meet much opposition from people who think the old way is good enough. Ridicule will be employed by those that think any kind of a building kept in any way will do for a school. The taxpayer who thinks the greatest crime committed by a public official is to add a cent to the tax levy will stoutly oppose any expenditure that means an increase in the rates. However, a health officer with a stout heart and the wisdom that comes from the desire to do the right thing for the coming generations will attain his ends in some way. Such an officer backed up by a teacher who also knows the truth and wants to see it exemplified in the manner of living of the children in his charge will be able to ride over all objection and finally enlist in the cause even the folks that were the surest the "cranks" were going to ruin the school.

The first great element in the rural-school problem, as suggested above, is the teacher. The second, as indicated, is the health officer. The third is an intelligent public interest that wants the best. With these three in any rural community, as well as in any urban community, every problem of school hygiene will be promptly solved.

R. W. Corwin, M.D., Pueblo, Colo., professor of surgery, University of Colorado, took up the discussion of the typical or unit plan of school building. He criticized a school board and public that devotes more time to the architecture of a building than to its convenience, safety, sanitation, and utility. He said that there were still boards and school districts which felt that the piling high of brick, stone, and mortar constituted the best expression of modern art and sanitation; but that fortunately two stories as a maximum had become the rule. He advocated the plan of single-story, detached school buildings—and if more than one story must be had, the substitution of the incline for stairs. Dr. Corwin commended to their investigation the unit plan of building. His is the application of a group system. Beginning with a central hall, or auditorium, the needs of the community are met by the addition of new buildings on either side of this hall, from time to time. Additions are made to meet the requirements of the situation. The number of schoolrooms may be made always to meet the demand, which is not the case with a building of many rooms. The many-roomed building is usually ahead or behind the needs of the district; there are vacant rooms intended for future requirements or crowded rooms waiting for the school board to build. Under the unit plan there is less waste room; there is less chance of fire, and, in case of fire, there is less chance for loss of property or damage by water; the danger to pupils is reduced to a minimum; light and ventilation may be obtained from any direction; there are no large hallways to accumulate dirt; there is less work for the janitor and no sweeping of dust and other refuse from one floor down upon another; recess may be taken out of doors at any time without disturbing other classes; there is greater field for individuality on the part of both teachers and pupils; the view from the ground floor is more attractive to children, being nearer to nature. The unit plan is no longer in the experimental stage, school plants of this type being in successful operation in Pueblo, Colo., and other districts in and out of the state.

SEX INSTRUCTION

T. W. GALLOWAY, JAMES MILLIKIN UNIVERSITY, DECATUR, ILL.

It is the purpose in this paper to dwell briefly on three points related to the proposition that we shall give our young people definite instruction in respect to sex: (1) the meaning and content of sex education; (2) the need of it and the promise it offers in improving present conditions; and (3) certain limitations that are on the enterprise—both of the transient and of the more permanent sort.

1. *The scope of sex instruction.*—The oncoming of the public conscience in this matter has been somewhat belated, but it is pretty well agreed in progressive circles today that we cannot properly trust to chance or to sinister influences the education of youth in a department of life that lies so close to its foundations.

This conviction as to the necessity of sex education has been developed by several diverse groups of thinkers and workers. In the first place, there has been a group of people—reformers—sensitive to the hideous aspects of the social evil, such as commercialized prostitution, white slavery, venereal diseases, and all the accompanying physical, social, and moral degeneration that characterizes the perversion of sex. In attempting to meet and stem the dirty flood of pathological symptoms these people have reached the conclusion that the youth of the land must be brought to know the dangers

and be guarded as far as knowledge and right incentives can guard from the pitfalls of sex indulgence. This viewpoint is urgent and compelling, and must cut a large figure both in the quality and in the spirit of the instruction.

It must be remembered, however, that this point of view with all its intensity of importance is a narrow and partial one, inasmuch as its motive lies in abnormal and pathological aspects of the subject. Disease and crime are not the chief problems of life. Sound development, perfect adaptation, and sane living are rather the real problems. The caring for wounded soldiers and even the prevention of sickness are not the prime work of any army. At best these are but incidental and tributary to the main problem of fighting. In quite the same way sex education looked at merely or primarily as a means of removal of sexual excesses, abnormalities, and diseases, important as they are, is not broad enough to meet the real human problem.

In the second place, another group of students have been approaching this interesting subject from an angle as far removed from that of the sensitive men and women who are our social reformers as it is possible to imagine. These are considering the subject from the biological and scientific side. Their interests have centered in the possibilities of race improvement thru better breeding—thru heredity. These students are called eugenists. They are not moved by sensitiveness to the social and moral abuses of sex, as are the reformers mentioned above. They think rather in terms of the loss of present and future social and industrial efficiency thru the hereditary transmission of incompetence and criminal tendencies, sexual and otherwise. In other words, sex and reproduction become to these students a powerful means, when understood, of improving the quality of the human stock. This manifestly extends the scope of the educative matter and manner; and the intensity of conviction as to need of education is scarcely less than that of the reformers, altho the program must necessarily be more vague, awaiting as it must fullness of knowledge.

Finally, a third stream of influence has still further broadened the scope of this educational impulse. Among thoughtful educators there have been many who have felt an increasing consciousness that reproduction and sex are among the most important human functions and qualities; that the impulses connected with them are not primarily low and vicious, but are as natural and clean as any possessed by us; that these impulses are as general and almost as imperious as the selfish ones of thirst and hunger by means of which the needs of the individual body are met, and that their imperiousness is a measure of their importance in life; that they are at bottom socializing impulses and lead to the ongoing and welfare of the species; that such vital and universal impulses cannot fail to furnish most valuable avenues and constructive materials for positive educational work.

In a word, these students hold that the powerful native impulses that have played so important a part in racial history must be able to make more contribution to individual education and development than merely to furnish an arena for fighting against abuses and perversions. Therefore, in failing to use positively and constructively the phenomena of sex and the facts arising out of them in the education of the child, we are neglecting one of the most potent educational instruments that we have.

It will readily be seen that these groups of contributors to the idea of sex education have brought a progressive broadening of the idea, and that their contributions are supplementary; and therefore that all three must be respected and included in any catholic handling of the problem.

The reformer would educate in respect to the facts of reproduction and sex in order that youth may be pure and that he may escape the diseases, personal and social, that grow out of vice. The eugenist would educate in matters of reproduction and sex (which means heredity) in order that we, as a race and as individuals, may secure better matings and more perfect offspring and thus build up the stock. The educator would seek to use the facts and instincts and impulses of reproduction and sex in their proper order to stimulate the right and sound personal development of the whole individual.

Sex, as we well know, contributes biologically in a very profound degree to normal individual development. The physical, mental, temperamental, and spiritual differences between men and women exist because of the fundamental influence of sex development and functioning upon the whole course of life. These things are not related to sex in a merely incidental or mystical way, but are directly and causally related. It cannot fail to be true, therefore, that a knowledge of the meaning of sex and its allied impulses will contribute equally to the proper adaptation of the child to the existing social structure so much of which is directly dependent on the fact of sex and its consequences.

In advocating sex instruction thru the home and school and other available social agencies, we are not meaning primarily that the young shall get such knowledge of the pathological conditions and the dangers as shall repel them into lives of cleanness, tho this is one of the most powerful agencies of restraint. Nor do we mean merely that they shall understand those laws of inheritance which may enable them to mix judgment with the process of falling in love, to mate well, and to contribute sound and healthy offspring to society. We mean rather that they shall have such clean and reliable knowledge and training in all the constructive and inspiring facts of sex that they shall properly sense its mental and spiritual contributions to full and normal life.

These upbuilding possibilities of sex lie chiefly about such facts and ideas as manliness, womanliness, purity, chivalry, love, marriage, home and family life, fatherhood, motherhood, parental care, filial devotion, and

all the higher individual, social, moral, and religious impulses and ideals that have in the history of the race arisen out of reproduction and sex. For best education the idea of sex must be redeemed and must carry the content suggested in the preceding sentence, rather than the perversions and abuses usually suggested by it. Thru emphasis on the pathological facts we have cut ourselves off from a free use of a most vital and influential series of human states. The scope of the present movement for sex instruction is to redeem the idea of sex and place it in a position to make a contribution to normal, consciously controlled development instead of being allowed thru neglect or misuse to work havoc in character.

2. *The need and promise of sex instruction.*—The sex instruction indicated in the preceding paragraphs must come to the boy and girl thru the home, the school, the church, or some of the less well-organized agencies of instruction. All thinkers are agreed that as much as possible should come from the parents in the home. Some, resenting the disposition gradually to place on the teacher more and more of the proper duties of the parents, deny that this important and difficult task should be imposed upon the teacher and the school. One cannot fail to have sympathy with this contention; and yet it remains true that the children do not get the needed instruction in the home. They come to the schools, for the most part, with no knowledge or with a stock of half-knowledge and vulgar misinformation which is very difficult to overcome.

The failure of parents to do this work for their children is due to several things. There are some who still insist that children should be kept in ignorance of such matters as long as possible, on the theory that ignorance means innocence and safety. The real reasons in the great majority of cases are that they are indifferent and cowardly, or they feel that they do not know what to say and how and when to say it.

The speaker has for a number of years given a separate series of lectures to the young men and young women of the Christian associations of Millikin University on the subject of sex and its connotations. At the close of these talks a list of questions was submitted to them and the young people were requested to give anonymous answers. A brief statement of the results will serve to show something of the need of education in the home.

Among the young men it was found that 58 per cent had information about sex matters before the close of the tenth year, sufficient to make a permanent impression on them. About 50 per cent of the girls had received such information by the close of the eleventh year. Nearly 70 per cent of the boys and 60 per cent of the girls received their early knowledge from slightly older or more sophisticated companions. More than 90 per cent of the boys who were coached by their boy companions were taught at an early age. When the parents gave the information it came between the eleventh and the fourteenth years chiefly. At the latter age 98 per cent of the boys had already had their information.

Of the boys who got their chief knowledge from boy companions, about 70 per cent expressed the conviction that they had been injured by it. Only about 50 per cent of the girls similarly instructed thought it had been of injury to them. Of the boys who had been instructed by parents, or similar teachers, 90 per cent thought the information had been a positive help to them. Among the girls about 80 per cent felt they had been benefited.

The young people were practically unanimous in the opinion that properly given instruction would have been of value to them in making their personal adjustments to this class of facts, and in the mental states and social relations growing out of them.

While, in the nature of the case, these questions and answers could not be definite and exact enough to give the statistics any scientific finality, the results are doubtless broadly representative of the conditions in the picked homes from which the body of college students come. Several things are sufficiently manifest from them. It is clear that those parents and teachers who insist that children shall be kept in ignorance and innocence in respect to the subjects do not really have a choice between ignorance and information. The only choice open to us is whether the early and most impressive information of our children shall be sound, with pure and wholesome associations and connotations, or shall be partial, inaccurate, and freighted with vulgar and degrading suggestions. It is very clear, furthermore, that the schools do not get the children early enough to give them their first needed instruction which is to render them immune to that which comes in subterranean fashion, and that parents must do this work; that parents are not giving it in most cases, and when they do it comes too late to be of most value.

From the whole situation it is suggested that one of our most urgent needs is to convince parents of the necessity that the home take an active part in the early sex education of the children, and to prepare parents to do this work effectively.

In summary, the urgent need for organized and systematic sex instruction lies in the dangers—physical, social, and moral—which modern society offers in this realm to the ignorant, the inexperienced, the misinformed, and imperfectly motived young; in the strong downward pull which commercialization of lust and vice furnishes; in the fact that there is running along from youth to youth at an early age, concurrently with our maturer efforts to educate, a whole series of vulgar and vicious interpretations of the meaning and place of sex, together with a vocabulary that does much to inhibit the possibility of our later instruction in these matters.

The promise which sane sex instruction holds out is this: the order of the universe seems to put a premium on real, sound, adequate knowledge. Ignorance or false views about vital matters never in the long run solved any of the questions relating to them. In other words, there is a positive,

tho not a complete, correlation between knowledge and behavior. Everything else being equal the person who knows right is more likely to do right than one who does not know. Mere knowledge of the horrible series of dangers to health, life, happiness, and morals that lie about sex indulgence will do something to establish internal inhibitions that will aid the external conventions to meet and check the imperious demands of the sex impulse in youth. Knowledge of the important part which normal sex development and sex control contribute to manly and womanly perfection, to say nothing of moral and social satisfaction, will do still more.

Important, however, as knowledge is in the ordering of life, it is necessary to remember, here as elsewhere, that information is not the whole of this task of sex instruction. The greatest promise of the movement is not that our children shall know a few facts about their reproductive and sex processes, about the diseases and misery that attend sex license, nor even about the marvelous way in which the phenomena of sex contribute to the quality of individual and social life at every point; but rather in this: that we are coming to understand that we may use the sex motive safely in the educative development of children provided we are wise enough to use it purely and loftily. In order to do this we must bring to their attention, step by step in a perfectly graded way, the best things the race has discovered by which appeal may be made to the desire to control these impulses. In brief, we must motivate self-control in matters of sex by appealing to such instincts, impulses, and ideals as the desire for perfect, normal manhood and womanhood; to chivalry; love for parents; sense of duty; admiration for purity; to the sense of the fairness in the single standard of sex behavior; to confidence in the conventions which the race has worked out respecting marriage and the home; to the moral and religious social sense which bulks large in adolescence. The child must be inoculated with these ideas in time to render him immune to the indulgences of the animal impulses and ingenious human perversions of them. In a word, the hope of sex education as a means of human improvement consists in graded instruction on all matters of reproduction and sex that bear on physical and mental welfare, plus all the possible reinforcement of personal and social morals and religion. The promise lies in the richness of the appeals that can be made in the interest of proper sex development and sex control.

3. *The limitations of sex instruction.*—The most important and permanent limitation under which we labor is in the fact that the correlation between knowledge and conduct is not perfect. We may never hope to get perfect conduct even with perfect knowledge. Even if we do what was suggested in the preceding section—give all necessary information, as we must, at the right time and by the right persons and in a perfectly graded way; and add to this the best of all the incentives which the race has gained to inspire, to encourage, and to furnish ideals and standards of social

virtue, of chivalry and respect for women, of devotion to right conventions, and of any other kind that may serve to give both internal and external control of these profoundly valuable and powerful impulses, we shall still find that the correlation between instruction and behavior will not be 100 per cent. The impulses of sex are too powerful to allow us to hope for this; but we may nevertheless hope for vastly improved conditions.

There are certain temporary limitations, however, which at present concern us much more than this. Chief among these are:

a) The present state of public opinion among both parents and teachers must be made favorable. As was suggested above, there are many parents who are not convinced apparently even of the necessity or desirability that they should give any careful or systematic attention to the subject in the home. Many others, who feel that parents should give their children instruction, do not feel that the schools should take part in it, but that it should be left wholly to the home. Public opinion, while it has progressed greatly on this subject in the last fifteen years, probably is not to the point where it would sustain the introduction of instruction in these delicate matters generally in the public schools. Before we can do much else we must educate public opinion to the point where it will not merely allow but will insist that the instruction in the school shall closely articulate with that which is done in the home; and where none is done in the home that the school or some other agency shall supply the deficiency.

b) No matter how good their intentions and in spite of the fact that the parent is in the best position of all teachers to do this work well, especially in the earlier years, it remains true that the average parent is least fitted both as to information and as to pedagogical method to do the teaching effectively. One of the first tasks is to convince parents of their duty. The next is to help them get possession of the matter and the method. This task of equipping the parent is one of the duties of our schools. Thru mothers' clubs, parents' and teachers' associations, and any other organizations of earnest adults, our schools must gradually equip the present generation of parents to do at least that portion of the training which ought to come before the school period.

c) Even if the way were perfectly clear for the introduction of sex teaching into the schools, we are at present limited by the fact that we do not now have teachers who are fitted to do this teaching tactfully and effectively. It is quite as important for good results that this subject be presented to youth wisely and convincingly as that it be presented at all. Good intentions on the part of the teacher are not enough. Indeed the task requires more than good intentions and information. This is peculiarly a venture the success of which depends on the personality of the teacher as well as on his knowledge. A few overzealous and underequipped teachers in each community can now by ill-advised activity impair the whole movement for years. It is essential just now that we shall not move too fast.

Since the teacher must take a large part in fitting present-day parents to do their duty and must learn to articulate properly his own work with whatever the parents are able and willing to do, it follows that we must, while public opinion is moving toward positive action, prepare a generation of teachers fitted both by education and by personality. In fitting teachers both to move and to move slowly there is an important work to be done by teachers' institutes, normal schools, departments of education in our universities—indeed by all of our higher institutions that have to do with teachers. We are past the hysterical stage and we need sober preparation.

d) Finally, there is at present no well-organized program of instruction to which we can point with certainty as having been tested long enough to insure its excellence. There are, to be sure, several in the process of testing which give good promise. They have necessarily been built up on theoretical grounds. We must institute in many sorts of places many sanely projected tests, and by extended trial and elimination of error find the very best way. We are sure that it must be thoroly graded to meet the interest and development of the youth. Proper grading, both in matter and in method, is much more important where we are seeking to modify behavior from within than where we seek merely to get mental mastery. Here is a task for the expert student of biology, psychology, education, and sociology. We are dealing with an enormously complex problem demanding the practical application of elements from all of these fields to the actual progressive needs of boys and girls. This work ought to be done under the guidance of our normal schools and departments of education in the universities.

These last-mentioned limitations are important and cramping; but we may confidently believe that they are temporary and will yield to intelligent treatment. This confidence is much strengthened by two facts: (1) by the great progress the race has made in a few centuries in the control of the imperious sex impulses in the interest of the higher things in human life and relations (this statement is made in full appreciation of the woeful failures that we still show); and (2) by the rapidity with which society nowadays throws itself enthusiastically and effectively into the teaching of what it is convinced is worth while.

DISCUSSION

Mary Elizabeth Bates, M.D., Denver, Colo.—Mr. Galloway's paper is sane and satisfying. We now realize that standards of right thinking and right living in social relations must be taught not only to men and women, but to boys and girls and even to little children. But I have noticed in all of this movement, from its inception to the present time, in every phase of it, that most of the effort has been expended upon the girl, the woman, the mother. Papers published, lectures given, plans proposed, all dwell upon the province and duty of the female and her responsibility to her children, her husband, and the community. The boy and the man receive some share of attention, to be sure, but the emphasis is on the female.

Yet in life, as a matter of fact, it is the attitude of the male that determines the sex standards of the world. It is the man's attitude, the boy's attitude that is fundamental, and whatever of sex hygiene or sex health you may teach the female, it is in practice largely wasted because she cannot alter the sex standards of the male, for only in exceptional cases, if she be married, can she control the situation, if her husband wills otherwise. She should but she doesn't.

In the vast majority of cases the wife receives her practical sex training from her husband. She usually learns nothing that is wholesome and healthy, sacred or beautiful, and when she has children and should teach them the majesty and dignity, the responsibilities, obligations, rights, and privileges of their sex, she has nothing beautiful or helpful to tell them, but she has, at least, the decency to keep still.

With a few fine exceptions we have no homes that are competent to teach the children in it; there are no schools, no Sunday schools or churches that even approach this part of life, which has more to do with the health and happiness and progress of men and women and children than any other thing in life.

The Mormon church is one fine exception, and I have always held the Mormons in high respect because of it. They have established and carried out a regular system of sex instruction for their own people. Missionaries, in pairs, go from home to home and teach the parents, telling them what and how to teach their children to achieve sex morality.

To train a boy effectively, he should be taught early, even from the cradle. In my long medical experience, I have learned that the right appeal at the right time is effective in some degree with almost every man, if made by the right person. No man wants an invalid wife. But it is folly to instruct the wife, and expect her to go home and teach her husband. He refuses to be taught by her. He knows more than she does or ought to, so he thinks. He must be told by someone to whom he will listen and in whom he has confidence. Therefore I tell my wives to have their husbands come to me, or their intended husbands come to me, and that I will instruct them, and I do. And it must come to him directly from the physician, he will not accept his wife's translation, and even resents her knowing that he does not know all that he should know about taking sex care of her and about what he should teach his children.

We have found in Colorado that the most active and powerful opponents to the teaching of sex hygiene are the Christian Scientists. They are not only determined to remain in silence on matters of sex health themselves, but they are determined that those who are not on their plane shall not be enlightened or trained in sex morality. So very fearful of this being done and so determined to prevent it are they, that they discover the intent to teach sex hygiene where none exists, and so afraid are they that it will be sneaked in under cover of other laudable teaching that they go to the lengths of preventing all proposed "ethical and humane education" legislation. During the legislative session of 1911 a bill was introduced in the Colorado legislature providing for the compulsory teaching of "moral and humane education" in the public schools. The Christian Scientists defeated it on the ground that it was proposed to teach sex hygiene. At the next session, 1913, I suggested to the framers of the bill that the word "moral" appealed at once as secular or sex morals and therefore excited opposition. In my own unsophisticated innocence, I advised the use of the word "ethical" in place of "moral," and the suggestion was adopted. Straightway the Christian Scientists declared that "ethical" was the very latest style of cloak for the intended teaching of sex hygiene! Therefore they opposed it strenuously. When it was passed by the house, it went to the Committee on Education, the chairman of which was our one woman senator, Mrs. Helen Ring Robinson. In deference to the desires of the Christian Scientists, our senator kept the bill in her committee safely pigeonholed until too late for it to reach a final passage thru the senate. How very suspicious and fearful these particular opponents of such teaching are can be judged by the fact that this bill proposed to teach children, and have teachers taught to teach children, "the principles and practice of justice, honesty, kindness, moral courage,

and good conduct," and that amendments were passed or accepted to provide "that this act shall not be construed to include religious or sectarian teaching" and that "nothing in this act shall be construed to include the teaching of sex hygiene."

The framers of the bill were sincerely anxious to have taught everything in the way of right thinking and right living, and were willing to take what they could get, and teach the great lessons that are not inclusive of secular or sex training. Of the sincerity of the opponents of the bill who still insisted that sex hygiene was to be taught, you can judge.

Yet some way must be found to impress upon the boys who are to be men and fathers of men the true greatness and power of a normal sex endowment; to teach them reverence for motherhood and fatherhood in all creatures; to teach them to cherish their manhood as a divine possession, to realize that sex power is the creative power of the world—the kind of force that took Columbus over the ocean and has pioneered and builded the world in art and architecture, music and literature, and social progress—and to feel that its responsibilities make it a sacred power to be conserved for life here and for the generations to come hereafter.

TOPIC: THE ADMINISTRATION OF HEALTH DEPARTMENTS

A. THE ADMINISTRATION OF EDUCATIONAL HYGIENE

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I. THE PROBLEM

Looking at the big problems of our country in a broad, sociological manner, probably most statesmen and students of public questions will agree with the four following generalizations, namely:

First, there is an enormous amount of individual and national loss in this country due to reasonably preventable and postponable deaths, preventable serious illness, and preventable lowered vital efficiency issuing from a multitude of minor ailments and physical defects.

Second, health knowledge and medical science possessed by the few have advanced far beyond health practice in the provinces of both personal and public hygiene.

Third, an enormous amount of public health opinion has developed in this country which has found more or less adequate expression in an unusual variety of public health agencies, especially in the public schools. Play and playgrounds, medical inspection of school children, open-air schools, dental, surgical, and medical clinics, better school santitation, public health education—all these are evidences of the renaissance of the physical conscience of the race and the more or less vague desire to make specialized, private knowledge actual public health practice and living.

Fourth, all these heterogeneous elements which have been pushed or pulled into the schools at various times, by various agencies, and for various health and development purposes, are, as yet, in a relatively chaotic, uncorrelated, and inefficient condition. They have not been made an organic unity centered upon the solution of the school and national health problem.

The problem of the efficiency of the public-school health agencies is the problem of this paper. As a part of a three years' investigation,[1] the writer visited and studied the school health provisions of forty cities. Out of the investigation and previous experience in this field there has gradually come an appreciation of what the administration of educational hygiene should be. In the short time here allotted me, I thought I could do no better than to bring together some of the chief practical recommendations of the study for your consideration and criticism.

II. SOME SUGGESTIONS IN REGARD TO A TENTATIVE STANDARD PLAN FOR THE ADMINISTRATION OF EDUCATIONAL HYGIENE, WITH SPECIAL REFERENCE TO MEDICAL INSPECTION

1. *The correlation of school health agencies.*—The heterogeneous and isolated elements of educational hygiene in state and local school systems very much need integration in a single department headed by one who is both a physician, well versed in children's normal and pathological conditions, and also a physical-educator with knowledge and experience in the other divisions of the problem. These divisions of educational hygiene we may well agree upon as those first suggested, I think, by Dr. Thomas D. Wood, of Teachers College, Columbia University, but in other terms namely:

1. Medical Inspection
2. School Sanitation
3. Physical Education
4. Teaching Hygiene
5. Hygienic Teaching

The term "medical inspection" is a misnomer for a number of reasons, but chiefly because the school medical service is reaching out far beyond mere inspection. The name is, however, relatively fixed, and the more desirable term, "medical supervision," including both inspection and examination as well as clinical, preventive, and follow-up work, will probably have little chance of gaining headway, while "health supervision" would not do because this indicates the work of the whole department of hygiene and may, moreover, easily lead to confusion with the local health department of the city.

The last term, "hygienic teaching," is usually termed the "hygiene of instruction," but since in this country and abroad this term, "instruction," is gradually taking on the narrower meaning of the "pouring-in process," in contrast to real educative teaching, we naturally avoid it, altho Professor McMurray has not hesitated to use it in his new book on *Elementary School Standards*.

What we need, then, is men who can integrate all these isolated and largely undeveloped elements and center all toward the solution of the

[1] Two books have been published giving the results of this investigation, entitled, *School Health Administration* and *The Administration of Medical Inspection: A Tentative Plan*, the latter a reprint from the former: published by Teachers College, Columbia University, New York, N.Y.

school health problem. After some search, I have found that men possessing this all-round knowledge of the science and practice of educational hygiene are actually now available and can be procured for state, city, and rural-district school systems as supervisors of hygiene at salaries ranging from about $2,000 up to and beyond $4,000. They are comparatively few in number and somewhat expensive, and yet, as I have attempted to show in other places, they will not necessitate much addition to current school expenditures in a locality where school health provisions have already been established. The new, reorganized system need cost little more than the old unsupervised, uncorrelated, and wasteful system. Such a physician-physical-educator can, for example, do the work of two to four or five part-time medical inspectors and of one or two elementary teachers, or supervisors, of physical training. He can direct athletics and summer playground work, evening recreation centers, and public-school athletic leagues. He can direct the nurses in such a way as to make it possible in many places to eliminate attendance, or truant, officers, as is now being done in several places. He can make the work of the whole health and development corps more efficient, eliminating waste, testing results, cutting down exclusions and illness-absence, and consequent retardation, non-promotion, and elimination. He can be the health leader of the schools and frequently of the community, and can quite largely be held responsible for the health of the pupils and teachers of the public schools.

What we need is full-time workers, special qualifications, broad and scientific supervision, health leadership and experimentation, and, finally, a complete reorganization and integration of all the heterogeneous features and phases of educational hygiene.

2. *Officers of educational hygiene.*—In every state there are many cities, villages, and rural districts that are desiring skilled help in promoting health ends. It has been a matter of constant surprise to note the almost painful anxiety of many nurses, school officials, and medical supervisors, in the places I have visited, to learn the best methods that have been worked out by other localities and what can be done to put into operation or to make more efficient their school health provisions. With adequate leadership in each state it would not be long until most progressive communities had risen to the modern hygienic standards, and the backward ones had been powerfully stimulated to move in the inevitable direction. The schools and the states want health leadership. This important service can be performed by no less a person than a state supervisor of educational hygiene, in the state department of education. His function will be to visit, study, plan, inspire, revitalize, and co-ordinate all school health agencies in the state, and his department may well be divided into the five divisions above mentioned. Present school officers do not have the special medical and hygienic knowledge, the interest, or the time skillfully to manage this great, many-sided developing instrument for making healthy,

vigorous, and happy the lives of our developing citizens. This is the work of the supervisors of hygiene.

We have already mentioned the need of the local supervisor of hygiene for a city, a group of small cities, or for a rural region, say a township or county. A city as small as ten thousand population can easily afford such health leadership. As cities increase in size the possibility for such leadership becomes greater and greater.

3. *Organization of educational hygiene.*—The supervisor of hygiene is paid, let us say, $2,500 for his services for the beginning year or years. For two hours or more each day he may medically examine the school children. With two hours a day he can in the school year examine a maximum of about three thousand pupils and make such inspections (anything less than the annual routine physical examination once a year of each pupil) as prove necessary, apart from the examinations. Some cities now have two or three part-time physicians for this number of pupils. For each other group of three thousand pupils the supervisor will, at first, need a part-time physician. The latter should be paid from $40 to $60 a month of forty hours, on the average, for two hours' daily service in examining pupils and making a few necessary inspections of urgent cases referred to him by the nurse or teachers. He should make examinations in but one school a day, perhaps five different ones a week, or ten in two weeks, depending upon the number of schools necessary to furnish the required number of pupils, thus eliminating the great losses of time due to traveling about from school to school each day on tours of inspection—work legitimately belonging to the nurse. The physician is a medical examiner principally, not an inspector. He has as his assistant a school nurse who helps at examinations, refers to him difficult cases, makes most of the inspections, and does part of the follow-up work. The number of assistant physicians, or medical examiners, can roughly be determined by subtracting from the number of pupils, elementary and high, three thousand for the supervisor, and dividing the remaining number by three thousand.

During the remainder of his day the supervisor of hygiene can devote himself to the supervision of the work of the nurses, the assistant physicians, the hygienic aspects of new and old buildings, the school clinic or clinics, if any, play and playgrounds, athletics, and the other work of physical education. Here, as suggested, may be another large saving toward his salary, for in many places the present poorly trained elementary physical training teachers, with salaries ranging from $500 upward, may be entirely eliminated. We have now in their place one who knows not only the field of hygiene, and physical education, but vastly more in the field of preventive and curative medicine. A number of other such savings toward his salary will be apparent to many superintendents when the idea is applied to their own school systems. Where, of course, cities or other localities have done little or nothing toward meeting the health situation,

have few or no teachers of physical education, have no nurses, no physicians, no clinics, little or no expenditures for the improvement of the health and energy of their charges, then to make modern hygienic knowledge general school and community practice will mean money, from 2 to 3 or 5 per cent of current school expenditures. But even here a 3 per cent increase, say, will not mean permanently increased outlays for the simple reason that bad health conditions unremedied and unprevented have been, already, a large and insidious means of waste. Health is the greatest economy a school can purchase; and preventive education must make large use of preventive medicine.

At the beginning, there should be at least one nurse to each physician, including the supervisor. In most localities, however, there will probably soon be provided one nurse for, at most, each two thousand pupils enrolled. A system with six thousand enrolled elementary and high-school pupils would thus have a hygiene supervisor, two assistant physicians two hours a day, and three nurses. The latter would be on full-time, about forty hours a week, thus giving four times the number of hours to the service as the assistant physician. Whether there need be any elementary teachers of physical training, or more nurses or physicians, or any other changes, can be determined thru intelligent investigation by the supervisor and superintendent after the system is started.

The present directors of physical education in the high schools, with their gymnasiums and regular physical education work, will perhaps be kept, a man and a woman for each large high school or group of high schools. Such persons, however, should have medical training in order that they may, to a large extent, carry on the work of medical inspection for the high schools and do the best work as physical educators. Not having such equipment for their work, they should be given necessary medical training by the supervisor; and they should also attend summer colleges, for that purpose. Each pupil in the high schools should be examined once a year by the physicians, male and female, if possible, while the inspections can be carried on by the teachers, nurses, and physical training teachers. Since the latter see all the pupils each week, they should bear most of this responsibility. When trained, they may, with the help of the supervisor, be able, perhaps, to make unnecessary any visits to the high schools by nurses and assistant physicians.

Both the supervisor and at least part of the nurses should work eleven months in the year, the latter in relays to bridge over the summer months, some in July and some in August, in order to carry on the much-needed inspection of children in summer schools and playgrounds, the home visits necessary for new cases and for obtaining cures for old cases left over uncured from the school year, the instruction of mothers in the prevention of infant mortality, and the home care of the children soon, if they live, to become members of the schools.

The salary for the nurse should not be less than $75 a month for eleven months, but paid twelve times a year the same as other school officials. Inexperienced nurses may be started at a lower salary and a higher maximum should be established, while all should be on a definite salary schedule, the same as teachers.

It is possible that all part-time work for the assistant physicians may be eliminated in many places. It is a problem yet to be worked out. Part-time services are undoubtedly only a temporary makeshift. The arguments that such work keeps the physician in touch with his profession, and that it prevents his "going to seed" in routine seem to be of very little force. The right kind of supervisor will win the respect and co-operation of the medical fraternity of the community and will keep his assistants in touch with the developing science of their profession and general medical sociology; while physicians who would "go to seed" in the manifold phases and developing opportunities of this new work in the field of state control of the health of the young are such as would "go to seed" in any system and any kind of work, and should be eliminated as soon as possible. No school official of the right type can today get very much out of touch with actual life and scientific and social progress.

The assistant physicians may give three hours each morning to the work but it is doubtful whether it would be wise to require them to do the work the two or three hours of the afternoon also. They might be employed to teach hygiene in the high schools, to help supervise the physical training, etc., but they would require a salary two or three times that of nurses, and it is doubtful whether it would not be better to eliminate the physicians and employ only specially trained nurses and continue their training in service. Diminishing returns with the increase of salary of physicians speedily bring in the school nurse, often more efficient generally than are physicians. Perhaps the solution of part-time will be made in this direction as it is in Oakland, Cal., at present. The weak link is the need for a large amount of medical education for the nurses before and while in service. This, too, furnishes a very definite problem.

4. *The method of medical inspection.—a)* The preliminary standardization clinic: The supervisor of hygiene should meet the physicians and nurses at the beginning of the year and with them examine a number of children. Teachers and principals may also be present. Their object is the development of common standards and good teamwork. Teachers should be instructed as to their large and important part of the work in referring children for inspection and in seeing that cures are obtained; and symptom charts and medical inspection handbooks such as Hoag's *Health Index of Children* (Whitaker & Ray-Wiggin Co.), or Cornell's *Health and Medical Inspection of School Children* (F. A. Davis Co.) should be furnished them thru the school libraries. Dresslar's new book on *School Hygiene* (Macmillan) is valuable for most phases of school hygiene. Ditman's *Home*

Hygiene and Prevention of Disease (Duffield), Lippert and Holmes's *When to Send for the Doctor, and What to Do Before the Doctor Comes* (Lippincott), and Hutchinson's *Handbook of Health* (Houghton Mifflin Co.) are three new, very simple, and very practical books for teachers, nurses, and parents.[1] Holt's *Diseases of Childhood and Infancy* (Appleton) is authoritative, encyclopedic, and technical, but exceedingly interesting to those devoted to the whole child, and very enlightening as a general reference.

The present lack of agreement in the kind of work done by physicians and nurses in the way of exclusions, degrees of defects to be referred for treatment, co-operation with teachers, methods of recording and reporting, etc., can be largely done away with by such preliminary and other meetings.

b) The September room inspection of all pupils: The nurse and physician working as a team, the latter inspecting and the former helping and recording, can medically inspect an ordinary room full of pupils in a half-hour. At the beginning of each year they should make a rapid room inspection of their three thousand pupils in the first two weeks of the term. Only the most serious and the infectious ailments should be referred for treatment, since all pupils will be given a careful examination in turn before the end of the year anyway, and the object here is to get the children in good shape for their year's work and to prevent any possibilities of epidemics. Detailed directions for all this work I have given in the volumes mentioned at the beginning of the paper. Briefly, the pupils file past the physician as he stands with his back to a good light at the side of the room while the nurse records ailments, by the use of the code numbers of a weekly report form, on each pupil's cumulative health record card.

c) Occasional room inspections: Special, or occasional, room inspections will be made by the nurses thruout the year as they find it necessary. In case of an impending epidemic both doctors and nurses may make a room inspection of several or all schools to eliminate carriers and other infected children.

d) Individual inspections: Individual inspections will be made by the nurses of pupils entering that school for the first time after the September room inspections, of pupils absent for more than three days, of pupils referred by teachers each day, etc. The physician will inspect such children, especially urgent cases referred to him by the nurse or teachers, in the single school he visits each day. Work that the nurse can do as well should be left for her as much as possible. If possible, the assistant nurse should be at the school before the physician's arrival each day to eliminate all but the most technical inspection of cases puzzling to her. The extra nurse,

[1] Cruikshank's *School Clinics* has since been published by the National League for Physical Education and Improvement, 4 Tavistock Square, W.C., London, England; Terman and Hoag also have a new volume entitled *Health Work in Schools*, published by Houghton Mifflin Co., Boston, Mass.; and the writer has one forthcoming by a large group of specialists entitled *Educational Hygiene*, as well as a smaller volume, especially for teachers, entitled *School Health*. Lina Rogers Struthers, the first municipal school nurse of America, and supervisor of school nurses of Toronto, probably has published by this time a much-needed volume on *The School Nurse*.

on the two-thousand-pupils basis, can daily visit each school not visited by the nurse and physician who work as a team, and can help with the home visiting.

e) Examinations: Complete, routine, physical examinations of all pupils in the school system should be made each year. They will begin immediately after the September room inspections and last thruout the school year, each physician having sufficient children to keep him busy all year. The doctor and assistant nurse will work together in the medical inspection room and begin with the children of the lowest grades. The nurse will make the examinations for sight and hearing, make records, fill out notices, and calm the children and get them ready for the more strictly medical examination by the physician. Ten or more children can thus be examined in an hour, twenty in the physician's two-hour day, or a hundred as a minimum a week. The number will vary with the amount of consultation over puzzling cases, the age of the children, and the character of the neighborhood. No routine height, weight, chest expansion, or other anthropological measurements need be made. They are little used when made and are of little practical value. They take up much time, and most supervisors will find that they can be eliminated without loss. All health records will be placed on the individual health record card, and all other records and reports will be made out by the nurse, thus eliminating the great loss of time thru having physicians, at greater expense to the system, doing such work. Most individual record cards and most reporting systems are at present seriously defective. I have tried to devise a system which will eliminate many of the weaknesses. The report is made for each day and sent in weekly on Saturday afternoons when all the home visiting has been done. The extra nurse who does not work with a physician will make a report of her own inspections and home visiting.

We greatly need a tentative standard classification and terminology for all the ailments of children of school age. One worked out by the writer, by which to systematize and compare the ailments found in the twenty-five cities especially studied, is here offered, along with an estimate derived by much study of the probable number of children among each thousand pupils of all grades, who will be found to be rather seriously affected during a school year. They are only rough and average figures without deviations and based upon poor records. The actual sum of ailments for the twenty-five cities showed that pediculosis (lice) was most frequent, while defective teeth took second place.

This classification should probably be studied, modified, and made a working standard by a representative committee of the National Education Association in order to promote efficiency and inter-city comparison of results. At present we are practically without standards in this whole field.

TENTATIVE STANDARD CLASSIFICATION AND TERMINOLOGY OF SCHOOL AILMENTS FOR SCHOOL RECORDS AND REPORTS WITH THE PROBABLE NUMBER OF REFERABLE AILMENTS TO BE FOUND IN ANY SCHOOL YEAR AMONG 1,000 ELEMENTARY-SCHOOL CHILDREN OF ALL GRADES

	Number of Serious Ailments among 1,000 Elementary Pupils
I. NON-COMMUNICABLE AILMENTS	
A. Physical Defects	
1. Adenoids, nasal obstruction, etc.	50
2. Anemia	10
3. Deafness, defective hearing	5
4. Dental	660
5. Enlarged tonsils	60
6. Eyesight	70
7. Eyes crossed, strabismus, squint	7
8. Glands enlarged, adenitis	10
9. Heart defects	9
10. Lungs very weak, not tuberculosis	5
11. Malnutrition, debility, indigestion, general condition	20
12. Mentality, defective	10
13. Nervousness, chorea, habit spasm, nervous exhaustion	2
14. Palate defects	7
15. Skeleton, orthopedic defects (flat-foot, club-foot, etc.)	2
16. Spine: curvature, posture, round shoulders, etc	8
17. Speech: stuttering, stammering, lisping, etc	9
B. Common Ailments	
18. Abscess, boils, etc	5
19. Acute sore throat, cough, etc	2
20. Bronchitis	1
21. Cleanliness needed	20
22. Catarrh, rhinitis	10
23. Colds, coryza	30
24. Ear discharge, otitis media	15
25. Ears: ear wax (impacted cerumen), foreign bodies, etc	5
26. Eczema	7
27. Eyes: "sore," blepharitis, styes, iritis, etc	20
28. Headache (a symptom), migraine, neuralgia	15
29. Laryngitis	5
30. Nose-bleed, epistaxis	2
31. Pharyngitis, chronic sore throat	3
32. Rheumatism	1
33. Sex ailments and habits	10
34. Skin ailments, minor: herpes, seborrhea, acne (black-heads), etc	15
35. Stomatitis, mouth ulcers, "canker sores"	1
36. Wounds, sores, sprains, poison-ivy, chilblains, "first-aid," etc	150
37. Urinary ailments, incontinence of urine	2
II. COMMUNICABLE AILMENTS	
A. Parasitic and Minor Infectious Ailments	
38. Conjunctivitis, "pink eye," etc	30
39. Favus, yellow scalp sores	1
40. Impetigo, infectious sores	20
41. Influenza, grippe, infectious colds of a serious character	1
42. Pediculosis, head lice and vermin	50

TENTATIVE STANDARD CLASSIFICATION AND TERMINOLOGY OF SCHOOL AILMENTS FOR SCHOOL RECORDS AND REPORTS—*Continued*

II. COMMUNICABLE AILMENTS—*Continued*	Number of Serious Ailments among 1,000 Elementary Pupils
43. Ringworm, body and scalp	4
44. Scabies, itch	5
45. Tonsilitis, quinsy	10
B. Infectious Diseases	
46. Chicken pox	6
47. Diphtheria	2
48. Measles	4
49. Mumps	4
50. Scarlet fever	4
51. Trachoma, "granulated eye-lids"	1
52. Tuberculosis of the lungs	1
53. Tuberculosis of the bones and other parts of the body	1
54. Whooping cough	2
Total	1,409

III. CONCLUSIONS

This country is far behind several European countries in the provisions for school and national hygiene. Our death-rate is too high, our morbidity is too widespread and common, many parasitic and infectious diseases stalk abroad over the land, and the hygienic knowledge of our teachers, and consequently of our children and citizens, is very meager and entirely inadequate. The vast field of medical research has brought to the schools a wealth of health knowledge and many new agencies and instruments for governmental and community control over the health destinies of our people. Along with the problem of adequate vocational education and guidance for our "nation of sixth-graders," the health problem stands out as one of the great and pressing problems of life and the public schools.

The fundamental method of adjusting the schools to the situation is, first, to get specialized intelligence at work on the problem; second, to study and investigate health needs of pupils and community; third, to study the relation of the school to other health agencies in order to determine its supplemental function; and fourth, actively and energetically, with state aid and community co-operation, to go forward and make the health knowledge now possessed by the few the actual health practice of the many. Preventive medicine and preventive education must go hand in hand. The goal is economy, efficiency, national vitality, and national happiness.

B. THE ADMINISTRATION OF HEALTH DEPARTMENTS—THE COLORADO PLAN

R. W. CORWIN, M.D., PUEBLO, COLO., PROFESSOR OF SURGERY, UNIVERSITY OF COLORADO

The following is the school law of Colorado:

Physical Examination:

The state superintendent of public instruction shall prepare or cause to be prepared suitable test cards, blanks, record books, and other needful appliances and supplies to be used in testing the sight, hearing, and breathing of pupils in the public schools, and the necessary instructions for their use; and shall furnish the same free of expense to every public school in the state.

The teacher or principal in every public school, or, where there is no principal, the county superintendent, shall, during the first month of each school year, test the sight, hearing, and breathing of all pupils under his charge, such examination to be made by observation, without using drugs or instruments, and without coming in contact with said child; and keep a record of such examinations according to the instructions furnished, and make a written report of such examinations to the state superintendent of public instruction as he may require.

Every teacher in the public schools shall report the mental, moral, and physical defectiveness of any child under his supervision, as soon as such defectiveness is apparent, to the principal, or, where there is no principal, to the county superintendent. Such principal or county superintendent shall promptly notify the parents or guardian of each child found to be defective of the child's defectiveness, and shall recommend to such parents or guardian that such child be thoroly examined as soon as possible by a competent physician or surgeon with special reference to the eyes, ears, nose, throat, teeth, and spine. If the parents or guardian of such child shall fail, neglect, or refuse to have such examination made and treatment begun within a reasonable time after such notice has been given, the said principal or superintendent shall notify the state bureau of child and animal protection of the facts; providing, however, that whenever it shall be made to appear to the said principal or superintendent, upon the written statement of the parent or guardian of said child, that such parent or guardian has not the necessary funds wherewith to pay the expenses of such examination and treatment, the said principal or superintendent shall cause such examination and treatment to be made by the county physician of the district wherein said child resides, and it shall be the duty of such county physician to make such examination and treatment, and if he be unable to properly treat such child he shall forthwith report such fact to the county commissioners of the county, with his recommendation.

The state auditor is hereby directed to draw his order for such sums and at such times as the state superintendent of public instruction may require to carry out the provisions of this act.

The total expenses under this act shall not exceed one thousand dollars in any biennial period ending November 30.

I can do no better than to quote parts of "Health and the Schools" from the last report of the state superintendent of public instruction, 1912:

Health an Asset:

No heaping-up of wealth, no amount of culture will avail unless, as a people, we have health. Even from the standpoint of mere financial need, health is what the entire business world is demanding, and as a business asset it behooves us to develop the health

of our children; for health and reliability of character go hand in hand, and reliability commands a high price in the markets of the world. If we argue from the standpoint of industrial efficiency alone, we shall find that ill health is not only a barrier to development, but an enormous clog to our social progress

Every man, woman, and child in the United States should be taught the laws of health and the simple measures needed for protection. Not until our country becomes educated will control of disease become possible; for the solution of this problem lies in prevention, and prevention is education. This education must come thru the children. We are beginning to realize that our public schools are a trust, and that children, while under the supervision of the school authorities, should be safe from harm. We are also beginning to realize that efficiency rests not alone on education and intelligence, but is equally dependent on physical health and vigor. The state must broaden its interest and responsibility, and, if intellectual training is compulsory, make training for physical soundness no less so. It must also teach children the measures necessary to avoid disease, if our national health is to be preserved; and from the lowest to the highest grades in our schools the laws of health should be taught; for the child of today is the citizen of tomorrow. And, as health is fundamentally a moral as well as a physical question, we should see to it that proper emphasis is laid upon the care of the body, teaching children that it is not a thing of evil, to be subjected to harsh discipline, but is the home of the mind; and if the mind is to develop and come into its own, the body must be nourished and cared for.

One of the first requirements in our schools should be teachers who realize the relation of the child's physical condition to its school efficiency; for it is clearly demonstrated that failure in studies, nervousness, apathy, dullness, and much viciousness on the part of children are the direct results of ailments that are easily curable.

In general, the medical inspection of our schools aims, first, to detect communicable disease; second, to discover the physical defects of individual children. And it is an established fact that in communities where special attention is given to physical examination in schools the work is of high standard, the general health is greatly improved, and infectious diseases are reduced to a minimum.

In 1910–1911 the examination was incomplete, only 42 counties reporting. These counties make the following report:

Number of pupils enrolled	70,015
Number of pupils examined	48,279
Number of pupils with defective eyesight	13,879
Number of pupils with defective hearing	4,871
Number of pupils with defective breathing	3,070
Number of pupils mentally deficient	1,519

In 1911–1912 the examination was conducted in 55 counties, with the following results:

Number of pupils enrolled	130,948
Number of pupils examined	118,875
Number of pupils with defective eyesight	16,536
Number of pupils with defective hearing	4,599
Number of pupils with defective breathing	6,884
Number of pupils mentally deficient	1,504
Number of pupils morally deficient	494
Number with defects other than enumerated	2,521

The state superintendent of public instruction issued the following letter form regarding physical examination:

STATE OF COLORADO

NOTICE TO PARENT OR GUARDIAN

School..... Town..... County.....
Mr..... Date....., 191..

Your child————————has been examined according to Sections 68 and 69, School Laws Annotated, 1912, and it is found that——— sight, hearing, breathing, seem to be defective, and we advise you to take the child to a competent physician for examination and treatment.

I hope you will give this matter attention and send to us a satisfactory report from the physician employed, as we are obliged to work under the provisions of Sections 68 and 69, School Laws Annotated, 1912, and need your earnest co-operation.

In case of contagious disease, it will be necessary to exclude the pupil from school in accordance with the rules of the state and local boards of health, in order not to spread contagion.

.....
Principal

.....
County Superintendent

COMMENTS AND CRITICISMS

Any teacher can make a report; the teacher best trained in this work will make a more complete report; the expert trained in test-making will make a valuable report; the reports as given are of worth, but not until the state can afford to employ expert examiners will the best, most trustworthy, and really serviceable reports be secured.

The law has been of value—not only has it ascertained the condition of children but it has instructed the teacher and taught the parent; when parents learn there is hope—that will come with the next generation if the teaching now be right—but real progress cannot come until the public learn and observe.

Many now know and understand but are lacking in the very mental qualifications that make for good and best; not until there is progress in moral mentality can there be racial improvement.

Improved environment has accomplished much but there is much more to be accomplished that is not controlled by environment. We must begin back of environment; environment is not sufficient in these days of dissipation, degradation, and misguided sentiment.

Greater effort must be made to enlighten the ignorant, to bring the indifferent to a sense of realization, and to stimulate the educated to greater activity.

Never has the world been confronted with more difficult problems: Dr. Jordan has said that charity creates more misery than it relieves. Our country pours out its wealth lavishly for charity and does the very things that create misery.

We spend $32,000,000 annually upon the insane and encourage them to multiply their kind by giving them their liberty; we expend immense sums upon the feeble-minded, keep them under control when harmless, and

turn them loose to reproduce more fools when of the age to become parents; in like manner we deal with the criminal, the epileptic, the alcoholic, and the prostitute, who are mental and moral defectives, permitting them to propagate their type!

The buyer of intoxicants is punished instead of the seller. The government legislates in favor of foods but never against liquors.

We preach but do not practice.

We teach the child economy and set an example of extravagance. Mothers play cards, drink tea, and grow nervous—and fathers commercially dissipate—at the expense of the living and to the detriment of the unborn.

We teach environment and neglect heredity. We are a success at feeding but a failure at breeding.

Health to the pupil is of more importance than mental development; if so, teach and cultivate health, and give it more importance than any other study in school.

The value of environment cannot be overestimated—it should be taught in every grade and by expert teachers, especially prepared; but of more importance is the teaching of the science of heredity. Heredity begins at the beginning, it is the foundation of existence; environment, the superstructure of life. We should teach better heredity—eugenics; every school and every grade should have instruction in heredity and eugenics. The cause of feeble-mindedness, criminality, epilepsy, alcoholism, pauperism, and prostitution should be known and the prevention understood.

The cure cannot be brought about thru environment; upon engenics rests the salvation of the race.

C. CHILD HYGIENE AND THE PARENT

ANNA IRENE JENKINS, DIRECTOR OF ROOSEVELT KINDERGARTENS, PASADENA, CAL.

The cause of child hygiene has attracted to its standard the expert investigators from the entire range of living sciences. These experts have presented an appalling collection of data as to conditions and habits of life, offsetting these with an interesting array of scientific facts with regard to the laws of life and development. All of these data are becoming available thru bulletins, magazine articles, books, and lectures. Their figures do not always tally, neither are they unanimous as to the details of solution, but there are certain points of common agreement; i.e., that permanent improvement and development must come to the race by living in obedience to the laws of health; that you and I and our neighbors on both sides must ourselves *know*, and *practice* what we know; and that the chief responsibility for imparting the knowledge of nature's laws and their proper observance falls upon the shoulders of the parent and the teacher.

Now in taking up the phase of the problem before us today, let us sum up our assets and liabilities.

1. *The parent.*—There is: (*a*) a small percentage of mature, keen mothers who have studied long and experimented intelligently, and who are going forward with the assurance of ultimate success; (*b*) a much larger percentage of mothers just awaking to a need in themselves, anxious to be shown how to use intelligently this information which they are told exists; (*c*) a great mass of unawakened womanhood immersed in a search for diversion, and for daily bread—dwellers in palace and cottage; (*d*) a dawning appreciation that a father is a parent; (*e*) a progressive awakening along social and civic lines. What was once delegated to private philanthropy now becomes civic duty in preserving and improving the citizenship of the land.

2. *The school.*—With regard to the school we have: (*a*) an educational system which has done excellent service in its day and generation, but which in parts seems to have outlived its power of adjustment to changing conditions; (*b*) a shifting angle of vision as to the function and power of education; (*c*) an educational teaching force, overburdened in time, in duties, physically, and in mental demands and requirements; (*d*) a lack of appreciation on the part of the majority of teachers as to their individual social responsibility toward the community that employs them.

3. *Hygienic data and tools.*—(*a*) A fast accumulating number of books, magazines, bulletins, expert investigators, foundations, state and national departments are all seeking a solution of the various phases of the problem; (*b*) housing and equipment of such multitudinous variety that they can not only serve for every phase of model sanitation but also as horrible examples of what not to do and how not to live are in evidence.

What now of the teacher who is to become the interpreter of hygienic living? She must first have a sense of her own social responsibility toward the community which has employed her. Then will she study carefully her community; really become acquainted and make friends with its people; see its needs and its possibilities.

It is thru *example*, *precept*, and *organized effort* that the teacher's knowledge reaches her people:

The example, first of all, of her own daily life and habits; and also the example of her room—its "atmosphere," its ventilation, and its cleanliness.

Now with regard to precept, counsel, personal touch, district visiting, what you will! Last winter, W. H. Allen, of the New York Bureau of Municipal Research, spoke to a teachers' club on "Modern School Problems." At the close of the address he said: "There is only one way to solve these problems. The time is coming when a portion of school time will be set aside for the teacher to visit the home of the student." The time wasted over the misunderstood child could be put to much better advantage by both teacher and child thru the knowledge of needs and advantages secured

by the personal study of the child's home and neighborhood environment. But the parent, you say, how does this help the parent? That depends on the parent, and on the tact and common-sense of the teacher. It may be a case of simple direct statement of hygienic law and practice needed in that home or by that child; it may be the recommendation of a magazine or a book; it may be the bringing-about of a meeting with some other parent whom you have found to have solved the same problem; or it may be just the cheer and confidence which will come into a timid mother's heart thru a purely friendly visit. The most infallible entering wedge for reform in child hygiene, among the ignorant and the foreigners, is the firm belief, on their part, in the teacher's personal interest and sympathy.

As for organized effort, we know that organization, as already referred to, brings a combined study by the parenthood of the district of the problems of that district—the needs and development of the child, the care of the school, of the home, of themselves, especially as this relates to the offspring; the protection of their home and family, secured only by a strict administration of law; for what real protection, if you please, has your home from disease even when your own premises are scrupulously kept if your next-door neighbor break every law of sanitation in the decalog? Yes, it is to reach this goal that you organize: an awakened community with a well-equipped parenthood, a civic consciousness, and a thirst for righteousness.

But do not expect all this to come at once nor, in a city community, entirely thru your own organization, for your local parent-teacher association, or whatever you chance to call it, plays the part of incubator and brooder, or, to change the simile, of the kindergarten of the parental training school. When this fact is lost sight of, one is likely to grow discouraged in the work.

And so there are certain things we keep in mind in the conduct of our organized work. The first aim is to get acquainted, parents and teachers, and parents with each other, for just as it is vital to the teacher to have personal knowledge of the home and neighborhood environment of her pupil, it is equally vital to the parents to know the atmosphere of the schoolroom which their children breathe; the children with whom their children associate; and the parents of these playmates.

Then, too, from this acquaintance comes the exchange of ideas, the personal experiences, and the mutual help which brings to light the general and particular problem of that individual district and the resources at hand to bring to bear in solving it.

Assuming more work or widening the scope of the work necessitates more machinery in the conduct of the business. Guard certain things here. Your timid mother will shy at machinery. Keep it well oiled and out of sight. Then remember that machinery is installed as a means to an end—it is not an end in itself. When any individual or organization becomes so enamored with watching the wheels go round that the cause is sacrificed

to keep the fittings burnished, then the usefulness of that individual organization has ceased.

The place of the teacher in this organized work is not necessarily that of visible leadership, especially after the work is well started. The teacher should always be fully alive to what is being done, available for counsel and sympathy, and ready to do her share of the work, but her share of the actual work is that of every individual member. An association run by the teacher alone or by the parents alone fails to accomplish that for which it is organized.

When a need is to be brought before the club, it should be presented in a simple forceful way, when possible with concrete illustration or demonstration, not by fulsomely worded generalities. If the teacher feels a need of improving the school plant say so, and show why. The parents will respond. They always have. On the other hand, if the parents feel a need, or do not understand, they should be trained to realize that it is their privilege and duty to say so.

Then as to the meetings—never let them resolve into a social function; but a cup of tea and a cracker, accompanied by friendly chat, have often opened the heart of a timid or careless mother. By all means have your expert lecturers; but there are occasions and needs much better met by a simple home-written paper or a "conversation" started with a remark or statement, reinforced with busy fingers and a mending basket.

The world is at its best, I feel
A triumph in the work I do;
With every turning of the wheel
I add a little that is new:
The masses shapeless thru the past
I—even I—give shape. I bring
From silent uselessness, at last,
The pleasing, useful thing.
All that has been since first the light
Shot out across the gulfs of space
Was that my crowning labor might
Put something in its ordered place.
The sound the toiling thousands make
Is earth's sublimest symphony,
And I, a worker, proudly take
The part assigned to me.

DEPARTMENT OF PHYSICAL EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—WILLIAM E. DAY, Deseret Gymnasium.....Salt Lake City, Utah.
Vice-President—W. J. MONILAW, University of Chicago.....Chicago, Ill.
Secretary—MABEL M. WRIGHT, Carl Schurz High School.....Chicago, Ill.

FIRST SESSION—WEDNESDAY FORENOON, JULY 9, 1913

The meeting was called to order at 9:30 A.M. by the president.

W. R. Tyndale, M.D., Salt Lake City, Utah, presented the first paper on "Blood Pressure as an Indication of Condition." The paper was discussed by C. L. Shields, M.D., Salt Lake City, Utah.

The second paper, on "The Effect of Altitude on Health," was given by A. J. Ridges, M.D., Salt Lake City, Utah. Jakob Bolin, of the University of Utah, Salt Lake City, Utah; Thomas D. Wood, M.D., Columbia University, New York, N.Y.; Baroness Rose Posse, president of the Posse Normal School of Gymnastics, Boston, Mass.; and Eugene Roberts, Brigham Young University, Provo, Utah, contributed to the discussion.

The last paper on the program, "Physical Training in the Rural School," was presented by Orson Ryan, superintendent, Jordan School District, Midvale, Utah. The discussion was led by Adam Bennion, principal, Granite High School, Salt Lake City, Utah. Others participating in the discussion were Thomas D. Wood, M.D., Columbia University, New York, N.Y.; Jakob Bolin, University of Utah, Salt Lake City, Utah; and Joseph S. Wright of the Francis W. Parker School, Chicago, Ill.

Professor Bolin then moved that the chairman be instructed to offer the following amendment to the resolution on "Child Hygiene and the Rural School," as submitted by the Committee on Resolutions at the annual business meeting of the active members of the National Education Association on Thursday, July 10:

"8. Gymnastics, with the object in view of furnishing an all-sided physical activity unobtainable without this means and necessary particularly for the prevention of school deformities."

Motion carried.

The following nominating committee was appointed:

Eugene Roberts, athletic director, Brigham Young University, Provo, Utah.
J. A. Pipal, physical director, Occidental College, Los Angeles, Cal.
May G. Long, director, physical education, public schools, Everett, Wash.

SECOND SESSION—FRIDAY AFTERNOON, JULY 11, 1913

The meeting was called to order by the president.

Professor Bolin reported that the amendment as proposed by himself at the Wednesday meeting was declared out of order by the Committee on Resolutions.

The first paper of the afternoon, on "Present Needs of Physical Education in the Public Schools," was presented by Baroness Rose Posse, president of the Posse Normal School of Gymnastics, Boston, Mass.

The discussion was lead by Charlotte Stewart, supervisor of physical education, public schools, Salt Lake City. Professor Bolin, of the University of Utah, and Eugene Roberts, of Brigham Young University, added to the discussion.

The second paper of the afternoon on "Gymnastics as an Orthopedic Prophylactic in the School," was presented by Jakob Bolin, University of Utah, Salt Lake City, Utah.

Those contributing to the discussion were Baroness Rose Posse, president of the Posse Normal School of Gymnastics, Boston, Mass.; Joseph S. Wright, Frances W. Parker School, Chicago, Ill.; Eugene Roberts, Brigham Young University, Provo, Utah; Charlotte Stewart, Salt Lake City, Utah; J. A. Pipal, Occidental College, Los Angeles, Cal.

The Committee on Nominations presented the following report:

For *President*—Baroness Rose Posse, president, Posse Normal School of Gymnastics, Boston, Mass.

For *Vice-President*—W. J. Monilaw, University of Chicago, Chicago, Ill.

For *Secretary*—Orson Ryan, superintendent, Jordan School District, Midvale, Utah.

The report was accepted and the nominees declared elected.

The chairman ordered that a vote of thanks be extended to those who contributed to the success of the program by presenting papers, and to the secretary.

MABEL M. WRIGHT, *Secretary*

PAPERS AND DISCUSSIONS

BLOOD PRESSURE AS AN INDICATION OF CONDITION

W. R. TYNDALE, M.D., SALT LAKE CITY, UTAH

That blood, in being propelled from the heart thru the arteries into the capillaries and back again by way of the veins to the heart, flows under a certain pressure is self-evident. If blood flows it must flow under pressure. This force or pressure has been studied and measured in physiological laboratories for years, but it is only recently, by means of the perfecting of simple, accurate, and inexpensive instruments, that physicians have been able to make any practical application of this knowledge. And as physicians we are surprised daily at the number and importance of the facts that the sphygmomanometer, the blood pressure instrument, reveals to us. It has become absolutely indispensable to every well-informed, up-to-date physician, and it is the purpose of this paper to show that it is equally indispensable to the physical director of any gymnasium.

Instructors and teachers in physical culture seeing daily the benefit to large numbers in graduated exercises and systematic gymnasium work are apt to grow to believe that exercise can help, if not cure, all the ills that flesh is heir to. This is a dangerous tendency which the physician combats vigorously because he knows that rest more than anything else is the cure for many applicants who seek to enter upon regular gymnasium work for their ailments. Such individuals derive harm only, and some serious harm, if allowed to go on with exercise. A rigorous physical examination by a competent, trained physician ought to be accorded every applicant to the gymnasium, but inasmuch as this is not possible at present, great good may be accomplished by any layman with a sphygmomanometer. Its use can be learned in a few moments, and its findings are so accurate that every

physical director will come to rely upon it as his greatest guide and boon in giving advice to men and women regarding their physical needs and condition.

The normal blood pressure between the ages of eighteen to thirty years causes a column of mercury to rise from 100 mm. to 120 mm. Blood pressure increases with age normally as follows: from thirty to forty years, it should range from 115 mm. to 145 mm.; from forty to fifty years, 120 mm. to 150 mm.; from fifty to sixty years, 125 mm. to 155 mm. In men, blood pressure is nearly 10 mm. greater than in women. The increase with age is due to a gradual hardening of the arteries. The blood pressure in normal individuals is influenced by various factors other than age. Emotion and psychic excitement generally cause an increase in blood pressure. A heated argument may raise blood pressure 40 mm. in a short time. The first reading of blood pressure in any individual may be 5 to 20 mm. too high, due to the nervousness of the patient over the new apparatus. Sleep lowers blood pressure and it is always lowest during the first hours of natural sleep, rising slowly during time of waking. Muscular exercise causes a rise in blood pressure in proportion to the work done up to 50 mm., falling rapidly upon cessation of working, reaching normal in from 20 to 30 minutes. In work the greater the conscious effort, the greater the blood pressure; work without voluntary effort may have no influence on the blood pressure.

The preceding statements have all been preliminary to my real purpose which is to show you the practical everyday value of blood pressure determinations in the gymnasium. The finding of a blood pressure reading above 160 mm. in any applicant should result in the consultation of the family physician. It will almost always mean arteriosclerosis or chronic interstitial nephritis, the commonest form of Bright's disease. Any man with such a blood pressure should take only the mildest forms of gymnasium work under the closest observation. And many times he should avoid the gymnasium altogether. In order to maintain his high blood pressure his heart is already doing a great deal of overwork, perhaps is being strained to its utmost capacity. The additional strain of gymnasium work might result in cardiac collapse, or heart failure so called.

Low blood pressures, that is below 90 mm., are also serious. They mean a run-down, weakened condition; they occur in convalescence from all severe illnesses, and, when persistent, usually mean damaged heart muscles or a seriously deranged nervous system. The persistent low blood pressure case should also be sent to the physician. There can be no qualification of the following statement, that any man or woman with a blood pressure of 90 mm. or less, or 160 mm. or more, should be sent at once to his physician.

The observance of this rule alone would accomplish great good and would repay a thousand fold for the cost of the instrument and the time taken to ascertain such facts, but the sphygmomanometer will tell the

physical director much more than this. He may easily learn whether any exercise is too much for any individual or whether actual progress is being made in producing a condition of health and restored vitality.

The effect of vigorous exercise upon the blood pressure has been carefully worked out. At first, exercise in any normal individual causes a rise in blood pressure, the height of which depends upon his condition and the severity of the exercise. If the exercise be kept up or increased in severity, a fall in blood pressure begins which soon becomes subnormal, to return to normal at a shorter or longer period of rest.

Lowsley, an authority on the subject of blood pressure, says:

> When the subnormal phase returns to normal within 60 minutes, the exercise may be considered as lying well within hygienic limits for that individual; while a return that is delayed beyond 120 minutes may be regarded as exceeding these limits.

Dr. E. O. Otis took the blood pressure of 59 men, 6 boys, 3 young women, at three periods as follows: just before gymnasium work, immediately after, and then a little later after a short rest or after the usual bath. He came to the conclusion that if immediately after exercise the blood pressure is subnormal and remains so for some time, even if the exercise is moderate and not long continued, then for that individual, or for his condition at the time of taking the exercise, we may consider the exertion too strenuous or too prolonged. The effect of systematic training can be well shown by the blood pressure curve. In a number of cases as tested by Otis, the blood pressure would rise high, then fall to subnormal, to return to normal after rest. If this same exercise were persisted in day after day the rise in blood pressure would usually be lower and often at the end of the exercise would still be normal or above normal, showing that the point of fatigue now was not reached.

Dr. C. Ward Crampton, director of physical training and athletics in the public schools of New York, has elaborated a method which may be of inestimable value to physical directors and athletic trainers of all sorts in determining the condition of contestants immediately before severe athletic contests, showing both what men should contest to attain best results and also when to spare a man from a contest which might injure him. "This test consists of a comparison of the systolic blood pressure and the heart beat in the recumbent position, with the blood pressure and the heart beat when standing." If the blood pressure rises when the subject stands and the heart rate increases little or none at all, the subject's condition is excellent. To understand exactly what this means let us go into the method of the test in detail. And perhaps we shall do well to use the words of the originator of the method, Dr. Crampton:

> The patient is directed to lie down flat upon a couch with no headrest. The armlet of the blood pressure instrument is then placed around the upper arm. This should be arranged so that it bears the same relation to the heart lying as it will when the patient

is standing, so that no hydrostatic error will be included. Absolute quiet is insisted upon, relaxation of the muscles is necessary, and all emotional disturbances should be guarded against. The pulse rate is then taken by quarter-minutes for at least four successive quarters. These should be recorded until we arrive at a plateau in which the heart is steady, the indication of which may be taken to be the point where four records show no decrease. These four records forming a minute's record should be noted for comparison with the standing rate. Without releasing the grip on the radial artery, the systolic pressure should be taken.

This should be taken twice, and if any large difference is noted, a third time, and the average struck. If there is any considerable variation noted it may be due to several disturbing factors, such as an uncomfortable position, emotional disturbances, nervous muscular contractions, holding the breath, etc., all of which should be eliminated. These items recorded, the patient is allowed to stand and the same records taken in the same way with the same precautions.

It is important that the pulse rate should be allowed to fall to its standing normal after rising, for it is accelerated by the muscular act of getting up. The blood pressure also rises considerably at first (altho it may fall), but it strikes a balance as a rule a little before the pulse rate does. We may now compare our results and arrive at a conclusion as to the condition of the individual. The whole test takes less than five minutes.

It has been found that individuals up and around, that is in ordinary health, show a variation in blood pressure from plus 10 to minus 10, and an increase in heart rate from 0 to 35. Dr. Crampton in trying to determine the relative value of these two factors assumes "that the respective limits of their total ranges coincide, and divides each total range into fractional parts each of equal significance, and of balanced importance." From this he devised the following scale:

		Blood Pressure Increase				
		+10	+5	0	−5	−10
Increase in heart rate	5.....	A	B	C	D	E
	12.....	B	C	D	E	F
	20.....	C	D	E	F	G
	28.....	D	E	F	G	H
	35.....	E	F	G	H	I

In order to demonstrate the use and meaning of this scale I have here the results of two tests on my overworked assistant. The first reading was taken after an exceedingly hard day's work without much sleep the preceding night, showing, as we shall see, a deplorable condition, and demonstrating to what lengths an ambitious brain may drive a tired body.

	Rate	Pressure
Lying.....	66	110
Standing.....	86	100
	+20	−10=Condition G

The heart rate has increased 20 beats and the blood pressure has fallen 10 mm. This shows, by the scale, condition G. Two days later, after a good night's rest and less trying work, the reading was as follows:

	Rate	Pressure
Lying	72	110
Standing	85	115
	+13	+5=Condition C

This latter condition, C, is probably normal for this young physician in his present position of overwork.

Experience has shown the practical value of this test, "and athletes about to enter contests who have been tested by this method, even tho ignorant of the meaning of the test, have invariably and fatally carried out predictions."

Dr. Crampton gives numerous illustrations like the following:

Case VII.—F, coach of track team; fair athlete; "in fine shape." Test at 10:30 A.M. gave index of F, with increase of rate +20 and pressure −7. A few hours later ran a 220-yard dash; this was followed by a mild case of collapse and vomiting.

Case VI.—T, teacher, aged thirty-two years; weight 190 pounds; athlete. Had six hours' sleep, hurried breakfast, "fair shape"; one of the twenty best tennis-players in the United States, gave a record of +27 rate, and +6 mm. pressure at 3 P.M., both equal to E index. Played tennis from 4:15 to 6:15 with a very much inferior player; won the first two sets at 6–0, 6–3; lost the next three 6–8, 3–6, 0–6; demonstrating very clearly his lack of "staying qualities" on this particular occasion.

The other day I tested two players just before they engaged against each other in tennis. Miss B, a stenographer, age eighteen; good tennis-player, "feeling fine"; had been to dance the evening before.

	Rate	Pressure
Lying	90	100
Standing	120	105
	+30	+5=Condition E

Miss N, stenographer, age twenty-six, indifferent player, "feeling pretty good."

	Rate	Pressure
Lying	76	110
Standing	86	116
	+10	+6=Condition B

The young ladies knew nothing about the nature of the test, or the findings.

Miss B had invariably beaten her opponent, Miss N; but on this day the sets were as follows: 6–3, 6–8, 4–6; that is, Miss B lost two out of three sets, and was so much used up from the game that she consulted me the next day, when I discovered a mild valvular heart disease with evidence of a beginning break in heart compensation. On the other hand, Miss N, on this occasion, altho not feeling apparently as well as Miss B, played an exceptional game as might have been predicted from the test.

Dozens of similar cases have been cited by Dr. Crampton, who believes that he has shown conclusively that estimations of poor condition are accurate, and that the estimations of good condition are equally accurate.

One might go on giving example after example. If enough have been given to stimulate you, my hearers, to try out the test each for himself, my task is complete.

The physiology behind this test is most interesting, and involves a nerve mechanism which was called into action when man assumed the erect posture, namely, the splanchnic vasomotor mechanism.

The splanchnic blood vessels, veins especially, which supply the digestive organs are capable alone of holding all the blood in the body. These vessels must be kept in a certain state of tension. When a person stands up, gravity tends to drain the blood into these great vessels. This tendency is overcome by the splanchnic vasomotor nerve mechanism causing a contraction of the splanchnic vessels and a consequent rise in blood pressure. "The efficiency of this mechanism is essential to life; upon its successful working depends the blood pressure in the brain, on the maintenance of which depends not only consciousness but the working of every function of the body, and even life itself."

Swooning or fainting is a familiar example of a temporary inefficiency of this mechanism, which is very easily wearied by lack of sleep, by hard work, or by any unhygienic performance. Even the routine of our daily life exhausts it to a greater or less extent. This must evidently be so because even when we are completely tired out we know that our organs are structurally as sound as ever. It is our nerves that are exhausted. The impairment of the functions of this nervous mechanism leads, as we have seen, to the accumulation of blood in the abdomen. For this reason the tired man at night likes to read his paper with his feet elevated. The compression of the abdomen thus brought about mechanically forces back toward his head the blood that his tired nerves cannot control. The condition called shock consists largely of the partial failure of this vasomotor nervous mechanism. Its total failure is followed by the accumulation of all the blood in the abdomen, and death. Therefore, to use the words of Dr. Crampton:

> It is a very fair presumption that the working of this most important function, upon which depends blood pressure, the distribution of the blood, and the working of the brain, will be an indication of the condition of the body as a whole, and an index to its general efficiency.

As far as my own rather limited experience goes, I feel convinced that Dr. Crampton has proved his point and given the world a new and valuable test. I trust that physical directors, trainers, and physicians everywhere will give it a thoro trial.

In conclusion, I beg your patience, in urging still further the adoption of the sphygmomanometer in the gymnasium.

Its use would go far in banishing the more or less conscious antagonism between physicians and physical directors regarding the relative value of rest and exercise. Observation of the rule that any adult with a blood pressure below 90 mm. or above 160 mm. be sent to his physician would almost eliminate a class found at present in every gymnasium; namely, those who need rest and not exercise, and diminish greatly the possible harm that exercise brings when rest is needed.

After determining better and easier than any known method what applicants might expect to derive benefit from graduated exercises, this same wonderful instrument is the best guide to the kind and degree of exercise to take and is the best judge of the progress and success each individual derives therefrom.

DISCUSSION

C. L. Shields, M.D., Salt Lake City, Utah.—Dr. Tyndale has shown beyond a doubt that blood pressure as an indication of condition is of great value to the gymnast, the physician, or the physical director; however, a great many things outside the body influence blood pressure. Even climate and weather have a definite relationship to it. It is lower in the summer than in the winter, and it may be presumed that a great host of diseases coming with high blood pressure may be greatly aggravated by living in northern climates. There is very little chance for the ordinary individual in the gymnasium to discover that he has a high or low blood pressure unless this useful little instrument, the manometer, be systematically used in all institutions for physical training. A test by this instrument should always be made before any individual undertakes athletic training.

The great insurance companies have adopted this system, as have also many of the great industries which take men's lives in their hands. The physical educator, with the lives of so many young people in his care, should not be the last to grasp the value of the sphygmomanometer. But there is another point which ought to be emphasized here today. It is this. If we believe that all that Dr. Tyndale has told us is true, then should it not be used thruout all our educational as well as the commercial systems?

The child or student may look well, may seem to be the very embodiment of health, yet when the blood pressure is taken there may be revealed the beginning of a disease of great danger. Is it not possible that the problem of slowness in the classes or other mental apathy may be easily solved by the use of this system? Is it too much to hope that all the gymnasiums in the near future may bring forth an opportunity to all individuals for a more systematic physical examination, the first step of which shall be the taking of the blood pressure by this valuable little instrument, the sphygmomanometer?

THE EFFECT OF ALTITUDE ON HEALTH

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All that is definitely known about the effects of altitude on the human body might be recorded in a very small volume. There have been vague notions and general impressions taken for granted without careful investigation; but when these are subjected to keener analysis, we find that these popular notions are not well founded in many instances.

That the physical factors of climate and their relations to life are modified by altitude we know. Atmospheric pressure and altitude are, of course, closely related; and winds, which owe their origin primarily to fluctuations in the barometric pressure brought about by unequal heating of the earth's surface, are also modified extensively by the variations in humidity, which is again closely related to altitude.

The absorption of the sun's heat by the atmosphere depends almost altogether upon the watery vapor and the impurities suspended in it. These elements, especially the latter, decrease as the altitude increases. Consequently, air temperature decreases in intensity as we ascend above the sea-level; humidity and air impurities decrease also; and these factors, aside from their bearing on winds and other climatic variations, have some effect on human life.

We may very well approach the subject from the standpoints of physiology and pathology.

First, then:

Physiologic influence of altitude.—We know that the respiratory processes demand a certain oxygen pressure in the air, and that the absorption of oxygen by the blood depends upon the partial pressure of oxygen in the air without any relation to the pressure of the nitrogen. At sea-level, the barometric pressure is 760 mm. of mercury. Of this, one-fifth, or about 152 mm., is the pressure of the oxygen. Experiments on the blood of the cow and the dog have shown that when the oxygen pressure falls to 60 mm., the gas ceases to be absorbed but begins to be given off. The oxygen pressure is 60 mm. when the barometer registers 300 mm. of mercury. This corresponds to an altitude of about 17,000 feet.

The vital effects of ascent above sea-level are really felt at a much lower level than this, however, and do not seem to be due to the failure of oxygen supply.

Pathological effects of altitude.—Mountain-climbers describe a very peculiar acute disorder, shown by disturbances of the cardiac, respiratory, and gastric functions, when they ascend to about 10,000 feet. The breathing becomes difficult; there is weakness of the legs; the movements of the heart are painfully felt; there is faintness and nausea and dizziness; eating becomes impossible; drowsiness and confused mental activity follow;

there is swelling of the veins of the face, arms, and hands; and then bleeding from the eyes, nose, mouth, and bronchi, with severe headache and coldness of the extremities. These symptoms all abate when one rests in a recumbent position. It has been said that oxygen inhalation helps to restore the normal condition.

This mountain sickness has been a favorite field for speculation. It was called Acapnia by Mosso, who showed that it is due to the decrease of CO_2 in the blood, caused by an over aëration of the tissues. We may easily produce the typical effects by vigorous exercise and rapid breathing. About three years ago, Henderson, of Yale, aroused great interest when he stated that mountain sickness and surgical shock are the same thing in the final analysis, both being due to a lowered CO_2 content of the blood. And he produced the condition of shock by forced breathing and by opening the abdomen of animals, exposing the mesentery and passing a current of warm, moist air over it, by which method the CO_2 in the blood was much decreased.

It seems to be generally believed now that mountain sickness is not due to any important change in the oxygen content of the blood, or even to any serious deficiency of CO_2; but it is a temporary derangement of the vascular mechanism and faulty circulation of the blood to the vital centers. Newcomers to an altitude of one mile or more complain of mild symptoms, which quickly disappear. Little or nothing is heard of mountain sickness in its extreme forms, at least, in the high altitudes of Colorado; for Leadville is a thriving city more than 10,000 feet above sea-level; and thousands of people annually ascend Pike's Peak to an elevation of more than 14,000 feet.

The blood is capable of absorbing all the oxygen that the body needs at partial pressures far lower than man is ever called upon to endure. But our physiologic mechanism is adjusted to work under a limited range of atmospheric pressure, and the disturbances reported are chiefly those of a vascular apparatus suddenly removed from a lower to a higher altitude.

It is admitted that rates of pulse and respiration are increased for a time after one removes to a higher altitude, but these are gradually adjusted to the new conditions. The chest and its power of expansion increase with altitude. Gardiner and Hoagland weighed and measured one thousand children at Colorado Springs and compared the findings with those from a similar number of children in St. Louis. It was found that the children from the mountains had greater girth of chest, and possessed greater weight and height. Races living in mountainous parts are generally possessed of greater chest capacity than those living in low countries. It would seem that greater expansive power is required for those who breathe the rarer air.

With respect to the composition of the blood, all observers agree that there is an increase of the cellular elements, as found by the ordinary blood-

counting methods, in those who go to higher altitudes. In Peru, Viault found an increase in the red cells to 8,000,000 from 5,000,000, in ascending to 14,000 feet. This occurred in about three weeks. Professor Zuntz, by prolonged observations in the Alps, proved beyond all doubt that there is a permanent increase in the number of the blood cells following residence in high altitudes.

Following along these lines, Webb, of Colorado Springs, undertook to show that there is an independent increase of the number of the white cells of the blood in those who go to higher levels. And he believes that this is due to some stimulation of bone marrow by the high-pressure conditions, and that such is favorable to the treatment of tuberculosis. Since it is so well known that the leucocytes play the chief part in the fight against the tubercle bacillus in the body, it is at once evident that anything which can increase the number and efficiency of these little soldiers is greatly to be desired. Webb's contention does not seem, however, to be very well founded.

As to the conditions of blood pressure in high altitudes, there is little to be said. There seems to be a temporary rise in those who climb mountains or ascend in balloons; but this is soon adjusted. Mosso found that his blood pressure was the same at Mount Rosa, 14,000 feet, as it was at Turin. Janeway and Crile both found that blood pressure fell when animals were placed in chambers where the barometric pressure was lowered; and vice versa.

It seems fair to conclude, therefore, that the permanent effects of changing one's altitude are not so great as has been generally supposed.

PHYSICAL TRAINING IN THE RURAL SCHOOL

ORSON RYAN, SUPERINTENDENT OF JORDAN SCHOOL DISTRICT, MIDVALE, UTAH

A too common opinion regarding physical training in the rural school is that while it is necessary and desirable, yet, it presupposes, in schools where it is taught, that there shall be a teacher or director especially trained and prepared for this work and that a gymnasium must be provided.

I grant that a well-trained competent instructor is desirable and that a well-equipped gymnasium would not necessarily be an incumbrance; but they are not absolutely necessary and if provided would by no means give assurance that all rural-school children would receive efficient physical training.

I do not wish to be understood as being opposed to the specialist in physical training or to the gymnasium, but I do contend that efficient physical training in the rural school may be had without either. And I believe that it can never be attained if these are necessary requirements, for

the simple reason that their cost makes them prohibitive. Both are better adapted to congested communities where they are of course most desirable.

What is necessary for physical training in the rural school is organized, enthusiastic, co-operative effort of the superintendent and teachers plus as much technical knowledge, skill, and apparatus as can be secured. Enthusiasm, co-operation, organization, and common-sense will achieve wonders, and they are fundamental.

The organization necessary should provide for:

First: Supervised play
Second: Class or group athletics
Third: Standards of physical efficiency
Fourth: Folk dancing and indoor games
Fifth: Formal or corrective gymnastics.

The best and most efficient education is that which utilizes and extends natural activity. The natural activity of the child is play. This may be utilized and extended by intelligent supervision and is attainable under any conceivable school condition. Supervised play should, therefore, be the basis of any scheme of physical training for school children.

Because of the misuse of the term "supervision" perhaps the word "organization" would be better, yet I prefer the former because when not perverted its meaning conveys the correct idea, while the latter must be made to convey a meaning not inherent. In fact, organization is a necessary foundation for supervision.

Supervised play means simply intelligent, sympathetic leadership by a teacher who plays because she loves to play and sees in play the greatest factor in the child's development.

The first and perhaps the only absolute requirement for successful playground activity in the rural school is that every teacher and every pupil shall leave the building and be upon the playground during recess.

Authorities are practically agreed, and actual experience shows, that the school life of the child divides itself into four periods which mark different stages of development, each period having certain dominant characteristics and needs.

The grouping most commonly used is: Group 1—children whose development is represented by six or seven years of age; Group 2—children whose development is represented by seven, eight, or nine years of age; Group 3—children whose development is represented by ten, eleven, or twelve years of age; and Group 4—children whose development is represented by thirteen years of age and above.

While this most excellent division is of assistance to the teacher, it is not best arbitrarily to group the children according to it. But if the playground work is properly handled and there are established as many gravitating centers of play activity as there are groups of children, they will unconsciously divide themselves according to their natural characteristics

and development. Such a "self-division" is the ideal to be striven for and may be attained by establishing four centers of play activity which, like powerful magnets, shall attract and hold the children whose development and characteristics respond to that particular activity.

In two short years of experiment along this line in the Jordan schools, we have become convinced that such an arrangement not only affords an outlet for the child's energies, thus supplying one great means of growth and training, but it also places him in a proper social relation with his schoolmates and brings him into conscious contact with the world about him. It has a marked effect for good upon his language and demeanor; does away with the playground "bully," and the traditional playground "clique" with their many evils; and best of all it drives the pinched, careworn, faded, forlorn look from the teacher's brow and replaces it with the luster of health and happiness. Teachers and pupils come to know each other as they can at no other time or place. Perplexing problems of discipline and development are solved, for instead of being a taskmaster the teacher becomes a friend, companion, and playmate of the pupil. She develops a new dignity and power while inspiration and a larger life are imparted to the pupil. Of course, as Dr. Henry S. Curtis says:

> Supervised play will not make angels of street arabs, but it cuts out almost altogether the vicious and willful disorder and makes the sentiment of the school the strong ally of the teacher.

The teacher's business upon the playground is not that of a military commander, a sentinel, a spy, an overseer, or even a director. She is a sympathetic, co-operating, constructive leader, assisting in the development of the child's natural tendencies. She should follow the same principles as in teaching anything else, play with the children when a new game is introduced, and keep up the desire and interest until it has been thoroly mastered. The process of learning a game is not usually interesting; the real interest and pleasure come with a good knowledge of the game and ability to play it well.

Approached from this point of view, the recess period becomes the most important period of the day and the teacher who once becomes sufficiently acquainted with its workings and effects will rather absent herself from or neglect any other period.

It is often contended, because of the opportunity afforded the country child for free activity and play, that he does not need more play. My observation and personal experience has been that tho the country child may have an abundance of leisure he does not play enough. Especially does he lack in organized and co-operative games. He knows but a few games and these, as a rule, are "degenerates" and individualistic in their nature.

Class or group athletics is simply a form of competition by which every boy physically fit may enter any athletic event, and, if he does his best, feel

that he is helping his class to win, even tho he may not be good in the event in which his class has entered. In this form of athletics, a trophy is won, or a record made, not by the individual record of a boy, but by the average of the individual records of the boys in a class or school.

This plan does away with the objection often raised that athletics provides for the expert only. It reaches the boy who does not usually take part, and class spirit forces him to train conscientiously and to do his very best to win. Because it reaches not only the few athletically inclined boys, but may be extended to the whole mass of boys and girls in the public schools, it is given second place in our scheme of physical training.

No restrictions are placed upon the boys except physical fitness and no pupil is exempt from participation except for physical inability. Pupils refusing or neglecting to take part are placed in the list with a record of zero, thus discouraging the individualistic isolated effort so often found among country children and encouraging co-operation and community effort.

Events may occur at any time. In the Jordan District they occur as follows: the pull-up, in February; the standing broad jump, in March; running in April; and the shot-put in May.

The class record is found by adding the individual records and dividing by the number of boys entered.

In running there has been some difficulty in taking the individual records of the boys. The following method will be used next year:

Carry a Message to Garcia. The boys are lined up in two groups 50 yards apart. The timekeeper, who acts also as starter, stands by the finishing-line. When ready he gives Boy No. 1 *The Message to Garcia* (a soft roll of paper 1 to 1½ inches in diameter and 10 or 12 inches long); at a given signal Boy No. 1 runs and as he finishes passes the message (roll of paper) to Boy No. 2 who carries it back to Boy No. 3, and so on. As the last boy crosses the finishing-line the time is taken. The record is found by dividing the elapsing time by the number of boys that run.

Lady teachers are not afraid of this form of athletics. It is not how far the boys can jump, it is getting them to want to jump that is success. This a lady can do as well as a man, perhaps better.

The value of class athletics, as previously stated, lies, not in the special development of a single boy, but in the general development of all the boys. The boy who cannot jump is encouraged to jump; the boy who cannot or does not care to run is induced to take part in that activity and so receives the particular development which he most needs. In the Jordan District this year, 562 boys took part in the standing broad jump. In the final test each boy was allowed to jump three times, making a total of 1,686 jumps. The average jump was approximately $6\frac{1}{4}$ feet, a total distance of $10{,}537\frac{1}{2}$ feet, which is but $22\frac{1}{2}$ feet less than two miles. That all the boys should jump a distance of two miles, each boy contributing his portion, is, to me, of far greater importance than that one boy should break any number of state records, or perform a "stunt" which would be lauded in glaring headlines on the sporting page of every "daily" in the land.

The establishment of prescribed standards of physical efficiency suggests another form of competition, generally known as the "Athletic Badge Test," differing distinctly from all other kinds of athletics, in that it is not necessary to defeat someone in order to win. While this is one of the most desirable features of this form of athletics, it is not necessarily the most valuable one. The opportunity afforded each boy to discover his own powers and possibilities and the encouragement to bring himself to the prescribed standard of physical efficiency must appeal to all. In this form of athletics every boy who can bring himself to the prescribed standard, and who is doing acceptable work in the school, may win an athletic badge.

While a perfectly fair classification of the boys taking part would be somewhat difficult and might prove impractical, the division suggested by Mr. Lee F. Hanmer, of the Russell Sage Foundation, would, I believe, meet present needs and give general satisfaction. He suggests that the boys be divided into two classes:

First: Boys under thirteen years of age with the following standards: sixty-yard dash in 8¾ sec.; pull-up 4 times; standing broad jump, 5 ft. 9 in.

Second: All other elementary school boys with the following standards: sixty-yard dash in 8 sec., or, one hundred-yard dash in 14 sec.; pull-up 6 times; standing broad jump, 6 ft. 6 in.

The advantages and desirability of this form of activity are so obvious and numerous that they scarcely need comment. The fact that they may be used in a school of only one pupil or in the largest school in our nation with like results is at once attractive, while the opportunity afforded every boy to measure his strength and ability utilizes and extends a natural tendency, thus giving the best kind of education. For these reasons standards of physical efficiency should have a prominent place in the physical training in the rural school.

During inclement weather folk dancing and indoor games should be substituted for the playground activity. In general, they should be approached from the point of view outlined for play activity. Their benefits, like those of play, are primarily organic and social and offer the best kind of training for the boys and girls who are to be the men and women of our great democracy of tomorrow.

Formal or corrective gymnastics demands a place in our rural schools for the same reason that it is given in the city school, to counteract the evils due to schoolroom posture and conditions, and to prevent the tendency of our youth toward atavism in standing and walking habits, and to make correct posture habitual.

Because Swedish gymnastics is well adapted to present schoolroom conditions and requires no apparatus and but very little floor space, the formal work should be based upon the Swedish Day's Order.

The contention that necessary activity, play, or athletics will secure the desired development and prevent unhygienic posture is not well founded.

In addition to the phases of physical education mentioned, the æsthetic should not be neglected. As this phase of physical development is not governed by knowledge but by feeling or emotion, it is subjective and its development must come from within. It can and should, therefore, be the result of actions impelled by a desire to express a feeling, an emotion, or an idea. This result, by intelligent direction, can often be obtained from the play activity, the folk dancing, and the formal gymnastics, but it should also be developed thru reading, singing, and dramatization.

A desirable course of physical training for the rural school should, then, consist of:

First: At least fifteen minutes of enthusiastic organized outdoor play each day, provided that folk dancing and indoor games may be substituted during inclement weather.

Second: Class athletics in at least four events for all boys above the fourth grade.

Third: Standards of physical efficiency in at least three events for all boys.

Fourth: Formal Swedish gymnastics in all grades, beginning with two periods of one minute each in the first grade and gradually increasing to two periods of six minutes each in the eighth grade.

Fifth: Such informal games and æsthetic activities as may be an outgrowth of the studies provided in the curriculum, especially nature-study, geography, the industries, history, music, and literature.

With such a course well organized and enthusiastically administered it is but reasonable to believe that physical training would greatly assist in solving the problem of education in our rural communities.

DISCUSSION

Adam Bennion, principal, Granite High School, Salt Lake City, Utah.—A phase of the subject of physical training in the rural schools has as yet not been discussed—that of physical training in the high school. Here two very serious difficulties are encountered (perhaps they are met with in the city): First, that physical training is so often construed as meaning the maintenance of the various athletic teams on which the boys who really need physical development are never seen; second, that many high schools seem to exist, at least at certain seasons of the year, that these teams may carry on their operations at a very great sacrifice of scholarship—the real reason for the existence of any school.

I do not wish to be understood as opposed to competitive athletics; they have a place and that a very important one. But I do contend that no high school should become competitively "topheavy." The professional idea that each school should have a winning team at any price has resulted in a system of vicarious exercises wherein those who need little physical training indulge in what often becomes physical straining for the amusement of those who really need to be on the athletic field.

As to a solution of these difficulties:

First: Every rural school should have a campus—not only a piece of land, which every school can easily possess, but a plot of ground made into a campus that invites physical activity. No one feels particularly athletic at the sight of a sand pile or a weed patch, but every boy has a "Ty Cobb" inclination when he sees a well laid off diamond.

Let the school maintain such an athletic field that everybody wants to get out on it. And it is easily done. Any school, if it have the enthusiasm, can fence a field, can level that field, can shape a gridiron, can lay a track, and give the whole field an athletic appearance—to do these things is not a little physical training and all the students can be made to enjoy and be proud of it.

Second: More than one man, the coach, should be interested in getting the boys to participate. The faculty, to be an inspiration, ought to have physical vigor and they can get it at the same time that they are stimulating an interest in all the students.

Third: There should be a regularly specified time when all the students should be encouraged to be on the field and sufficient sport should be provided so that they may all follow their natural aptitudes rather than stand around to see the heroes play a game that is too complicated and difficult for them to engage in.

Fourth: There should be regular gymnastics. Students who are weak or defective should be given special consideration. Not nearly enough corrective work is done—it can't be until we cease giving all our time to "the team." In the four years of high school, practically any defect of posture or lack of co-ordination of muscle activity can be remedied by systematic corrective exercises.

All high-school students should be required to take gymnastics for at least one year and preferably for two. Country boys are usually strong but their strength lies in particular muscles. The inability of most country boys who have done heavy farm work to straighten the arms indicates that they have strengthened some parts of the arm at the expense of others. Gymnasium work should aim to develop the whole body.

High-school boys are still boys and with all their physical training the element of fun should be prominent. Gymnastics should never be allowed to become monotonous or laborious but should be given variety. Boxing, wrestling—with a determined effort to keep down the pugilistic—together with countless other games and sports, offer physical opportunities for all the boys of any school.

In conclusion, then, let the aim of high-school physical training be not physical straining or the developing of a team which shall determine the atmosphere of the school, but let it be an effort to build a strong body for every student and to offer activities that shall excite the interest of the whole student body.

PRESENT NEEDS OF PHYSICAL TRAINING IN THE PUBLIC SCHOOLS

BARONESS ROSE POSSE, PRESIDENT, POSSE NORMAL SCHOOL OF GYMNASTICS, BOSTON, MASS.

It is gratifying to find America well abreast of other countries in her appreciation of scientific forms of physical training. A recent canvass has shown that while many schools teach every variety of gymnastics, only about 20 per cent disclaim any knowledge of Swedish work; 70 per cent of the schools where statistics have been procured show that either the work is purely Swedish or that this method forms the basis of the exercises. It is to be remembered that the Swedish principles of arrangement of exercise are the Swedish system, a system which recognizes as valuable any good exercise if used in its rightful place, and it is so practical and so well adapted to the needs of growing children that it has been an easy matter to introduce it into the public schools. The German system has its many ardent adherents, and in some sections of the country this form of physical

exercise is taught exclusively. In some schools we find work which was once known as "American," tho it had no distinctive features except certain movements connected with a few pieces of special apparatus. In some private schools and colleges, we find only dancing and games taking the place of regular systematized exercise. But, however varied the kind of work, it is a gratifying fact that gymnastics of more or less utility are being taught more and more extensively with every passing year.

If we ask for criticism so that we may improve our work, we shall find many things which call for betterment. In this paper I will merely name a few of the most important.

First, we shall never obtain the best results from exercise unless at the time the surrounding conditions are favorable. There should be more out-of-door exercise. All thru the winter, except on the coldest days, the gymnastics should be taken in the school yard or on the roof, where, under certain restrictions, a suitable place may be prepared. In this way a more perfect oxygenation of tissue will be produced and even short periods of exercise may be used to great advantage. The best results are obtained when the period of exercise lasts from thirty to forty-five minutes. During the time the pupils are exercising, the schoolrooms may be thoroly ventilated and reoxygenated, so that when the pupils return they may go back to their mental exercise under the most favorable conditions.

Second, the teacher of physical training should classify his children according to their degree of gymnastic ability, rather than by school grades. By this method the more advanced gymnasts would be placed in Grade A, where all would be of about equal proficiency, so that no time would be lost waiting for weaklings to catch up, and progress could be made as rapid as the strength of the pupils would permit, resulting in a sustained interest in their work. The members of Grades B, C, etc., would have an incentive for improvement in order to obtain promotion, and at the same time they would not be forced to do exercises that were beyond their limit of endurance in order to keep up with the stronger pupils in their group. The weakest pupils, say in Grade E, being grouped together would have as much time as they required to overcome their difficulties and they could be given exercises which would be of little value to the more virile pupils but which would be of the greatest benefit in increasing the vitality of the weak. In this group would be placed pupils who were more or less defective, but pupils having abnormalities, deformities, or dullness of intellect should be given to a special teacher for treatment. For this plan to be carried out properly, the gymnasium should be large enough for several classes to exercise at one time, then the different groups may be handled by the director and his assistants, much as the games are supervised in organized recess work.

Third, is it wise to give so much attention to athletics among growing boys and girls? It is reported that a movement is on foot to standardize

the athletic sports of school children, and one or more meetings have been held for this purpose. Before the high-school age is reached this seems objectionable, as it gives too great a prominence to the idea of contests and awakens in many children a precocious appetite for applause and notoriety. Children, while allowed in a quiet way to have sports and even contests, should be discouraged from anything which brings them into undue prominence before the public. Even if the excitement and artificiality of the public events were not physically overstimulating, the moral effect of forcing the child thus early into a position where his vanity and self-consciousness are awakened would seem sufficiently unwise, while his early introduction to the methods of professionals is unquestionably harmful. Moreover, if the child acquires a taste for the immoderate excitement of contests, he loses interest in the less spectacular specific exercises which lead to health and strength.

Fourth, provision should be made for the application of medical gymnastics in connection with the work of the physical training department in our public schools.

The medical gymnast is a new feature in our schools. His work is unlike that of the medical director or of the teacher of physical training, and it is very different from nursing. The medical gymnast must treat cases requiring a special mode of manual and gymnastic treatment. He should be competent to treat various conditions arising from defects of circulation, digestion, locomotion, etc., such as anemia, dyspepsia, constipation, hysteria, neurasthenia, synovitis, rickets, Colle's fracture, dislocations, sprains, torticollis, chorea, and infantile paralysis (after the acute stage has passed and deformity is present). He may give a special kind of treatment in heart affections, he may give specified exercises for disorders of the chest, and he may improve the general health in cases of epilepsy. His best efforts will be required in the orthopedic cases. The treatment of all tuberculous diseases depends largely on the prophylaxis. Physical strength is the best weapon with which to defy the onslaught. If the physical strength increases, the vitality will increase and the germs may succumb. Gymnastics is one of the best of the prophylactic agents.

That the materia gymnastica of the department of hygiene or the department of physical training of our public schools may be complete, the schools must be provided with a room fitted up as an infirmary, where a medical gymnast may take charge of cases requiring his skill. If not possible, for financial or other reasons, to have an expert specially engaged for each school, one operator could be employed by several schools, each school being visited for two or three hours three times a week. In small towns and in private schools the director of gymnastics should be one whose training has included the necessary instruction to render him competent not only to teach gymnastics to the healthy pupils, but to treat cases requiring medical or, as it sometimes is called, therapeutic gymnastics.

In every case the one who gives this special treatment should have the diagnosis either of the school doctor or, in the absence of such an official, of any good physician.

Health, like salvation, should be free to all. It is an acknowledged fact that there are only a few doctors of medicine who know anything about the treatment of diseases by corrective gymnastics. Even if they have some knowledge of the subject they do not make the work a specialty because of the amount of manual work required. And unless these physicians have studied gymnastics they will still be forced to have assistance from teachers of physical training in order to obtain certain results in their work. Thus it will be seen that the work of the medical gymnast does not conflict with that of the physician, but is closely allied to it, as well as with that of the physical trainer, and yet is distinctly separate from either, and a department of school hygiene to be effective must have the services of all three experts.

In closing, let me emphasize the point that the physical training profession should acquaint the body of school educators with the fact that if there is a question of choice between two teachers of physical training, one possessing a college degree and the other a diploma from a special school for training teachers of gymnastics, the college degree should not outweigh the special diploma unless its holder has had a technical course fitting him to teach gymnastics.

The physical training profession should take steps to make its position clear and definitely to settle its standing in the educational field. Educators have a tendency to weigh all goods by the same standards. It goes without saying that a teacher of mathematics or history or French is better fitted for his work by his college course and the degree confers distinction. But the schools wherein teachers of physical training are prepared are planned on college lines, and the studies taught are all in advance of high-school courses, and some are equivalent to those of the medical schools. Such schools give specific knowledge for the training and development of the human body. Unless a candidate for supervisor of physical education has had a thoro course in the special normal schools of physical training, or its equivalent, he should not be considered eligible for such a position, even tho he be a graduate of several universities or medical schools.

Members of the physical training profession should lose no opportunity to impress upon educators the fact that their first duty to the child is to provide him with the strength necessary for the battle of life. Knowledge must be considered secondary to health. The nation that saves its citizens by enabling them to live a life of usefulness is performing one of the greatest feats in modern education and one of the highest services to humanity as a whole. And we must show that to accomplish this result what is needed in our schools is not the production of a few overdeveloped athletes, but an all-round physical training, which should increase the vital capacity

and promote the bodily development of every child in the school, so that he may enter into the fullness of life and know the joy of living. Only then will physical training deserve to be called physical education.

DISCUSSION

CHARLOTTE STEWART, supervisor of physical education, public schools, Salt Lake City, Utah.—A cursory glance from kindergarten to college reveals a deplorable lack of grading and definite placing of the materials of physical education. A rational, reasonable grading must be done, either within each system itself, or finally with the consensus of several systems, toward the making of a national standard. This standard to be educational must be flexible—adaptability is the fundamental principal of growth—but every cause must have its spinal structure. Such a grading must be based upon the physiological condition at certain ages and periods; the educational correlative capacities of children; and the sociological development of mankind. Herein come the advising power and staying hand of the expert. But if children or adults delight in, enjoy, and without stimulation seek a certain activity, there is a cue for classification. In planning this work consideration must be given as to just where and when certain games, sports, dances, or gymnastics will best fit into the normal development, for just there will the coefficient of virility be highest.

In the selection of material for the proposed structural course of study the field is large. Every individual cannot attain the development of the expert in every line, and besides, the problem of the school is to open up to pleasing view the worthy avenues of life and to give with that view an inspiration for progression that each individual may come into his own. Therefore, in physical work there should be a wealth of physical environment, gymnasiums, open fields, playgrounds, public swimming-pools, all under wise direction. There should be, in fact, enough opportunities in all phases of work to present material for selection.

Two simple, yet inclusive, purposes of physical education in the public schools are (1) to conserve in every way possible the health of the nation's citizens; and (2) to create, establish, and maintain the highest type of recreative activity.

One problem of the day and one not neglected by this convention is "education for leisure." Today, as statistics reveal, the average citizen spends eight hours at work, eight at sleep, and the remaining one-third of his time is for leisure. As the school prepares him for work so must it prepare him and that too for productive, not destructive, leisure. Recreation does not mean rest by inaction, but rest by reaction. One of the great functions of physical education is to prepare for that leisure. Social evils can best be reformed by a formatory, not a reformatory. The best formatory is the public school. Social insufficiencies and evils must be controlled by substitution, never by elimination. Love for pleasure, proper dancing, clean sport, wholesome activity, and courteous behavior, must be instilled into the fiber of the rising generation.

No subject in the curriculum can as adequately meet this demand as physical training in its amplifications. Right thought depends on right action, and a clean mind in a clean body, courtesy, and fairness are proper social relations. The making of citizens cannot be intrusted to the street or even the public playground. The public school in its classroom, corridor activities, or out-of-door play is pregnant with leadership, sportsmanship, character-forming, and law-abiding material that may be made real in its performance.

Nor must outlines, courses, standardization, or grading for one moment deaden the life, the activity, the joy in play. They are for the teacher who must endow her system, her ideality, with good wholesome realities, making practicalities idealistic and romance practical.

Even so must all educational factors join forces to lead the youth into a true knowledge of life that they may play the "game of life" fairly and squarely to the end—win or lose. To this the profession must pledge its heart and its hand.

GYMNASTICS AS AN ORTHOPEDIC PROPHYLACTIC IN THE SCHOOL

JAKOB BOLIN, UNIVERSITY OF UTAH, SALT LAKE CITY, UTAH

The duty of the school to prevent impairment of the child's physical efficiency and to employ means to counteract whatever deterioration may result as an incident to school life, so that the child may return to the parental home enjoying at least that amount of physical power which it possessed when entering the school, augmented by the growth and development that is natural to its years, is axiomatic, and may be taken for granted. It is the very least demand that we can make upon the schools from a hygienic viewpoint.

No words need be spoken before this audience on the well-established and well-recognized fact that many unhygienic influences are at work during school life, and that among these are forces which slowly but surely act upon the skeletal frame in such a manner as to give rise to certain well-known school deformities.

The school endeavors to minimize these evils by attention to proper seating, which includes appropriate distances from blackboards, maps, and charts; proper relation to the sources of light; proper sitting posture while reading, writing, and listening; properly adjusted furniture; and other similar means. This is orthopedic work, even tho negative in character. But it does not suffice, as is well testified by the increasing prevalence of the school deformities in each succeeding grade. A positive attack must be made by which one-sided fatigue may be avoided, the normal mobility of the skeleton maintained, its normal growth stimulated, and the neuromuscular tone developed. The only means serving this purpose at all adequately is supervised physical activity and particularly that formal artificial kind known as gymnastics in the narrower sense, properly conceived and properly executed.

The purpose of gymnastics is by no means solely orthopedic. He who so conceives it makes a very grievous error. There are general physiological and pedagogic functions of gymnastics which extend far beyond the orthopedic field. But he who forgets his orthopedic mission when teaching gymnastics fails in one of the essentials, because there is no other single, positively acting orthopedic prophylactic in the school and it is because of its general neglect that school deformities exist and increase in frequency with each succeeding school year. And the chief blame for this deplorable condition must be placed upon the physical directors themselves and the host of teachers of gymnastics for whom the term signifies but a con-

glomerate of athleticism, acrobatism, unregulated play, and soul-killing drudgery. I make this charge, well aware of its serious import. Were I not fully convinced of the absolute necessity for a reform in common gymnastic practice, I should refrain from making it now, as I have done in the past, in the hope that matters should slowly adjust themselves. But the process is too slow, and the time has come when the United States, already occupying an honorable position in several branches of physical training, should no longer be allowed to trail behind as one of the very last of nations, gymnastically speaking. It is apparent that Americans must pay attention to gymnastics as a distinct but integral branch of physical training and that bold words are necessary to attract such attention.

We must not suffer a condition to exist much longer whereby school deformities are not only not prevented but actually created, to be taken in hand by the orthopedic surgeon when they are practically incurable. There is a vicious attitude of mind abroad, according to which orthopedics belongs in the field of therapeutics, belongs to the surgeon, when as a matter of fact most of the orthopedic work ought to be counted as part of school hygiene.

If gymnastics are to fill the function of an orthopedic prophylactic, it is necessary that each single posture and each single movement shall in its form correspond to the normal skeletal development, shall be based upon the normal articular amplitude, shall reflect an orthopedic ideal.

To recognize the exact anatomical limitations and to watch carefully that these are never exceeded is the prime duty of the teacher of gymnastics as an orthopedist. To combine the postures and the movements into proper sequences, to give them the necessary strength, duration, speed, order in which to follow each other both in the individual lesson and in the course planned for a longer period, to fit them to the intellectual and moral as well as to the physical powers of the pupil, to attach to them the interest which is requisite for their fullest value, all these things are duties that fall to him as a pedagog and psychologist, if you please.

It is to the former aspect that I wish to direct your attention.

To illustrate my meaning I shall refer to a single example of mismanagement common in our gymnasia, viz., the care of the knee joint.

Gymnastically speaking, we may consider it as a simple hinge joint capable only of flexion and extension but no abduction or adduction. But everyone having any experience whatever with gymnastics of our day or, for that matter, of physical education in its broader aspects, knows that there are everywhere flagrant examples of knees powerfully adducted during exercises, which are apparently unnoticed by the teacher or at least do not call forth a correction. I see it in almost every gymnastic class I visit, it is a common attitude of pitcher and of catcher, in boxers and jumpers. Among women taking any form of activity it is the rule rather than the exception. An adducted knee violates our æsthetic ideals.

Countenancing it is a pedagogic mistake, because it leads to lack of precision and stability in all activities where a solid base is desirable. As long as the weight does not fall upon it, no appreciable physical harm results. But if the weight be sustained upon an adducted knee, it cannot be upheld by the muscles but by the internal part of the capsule, which, according to its passive nature, gradually yields and lengthens, jeopardizing the integrity of the joint. We need not be specially concerned about such accidental traumatisms as sprains and dislocated internal semilunar cartilages. They are not occurrences of every day, even tho they are more frequent than we should like to see them. Of far greater consequence is the resultant relaxation of the joint, which adapts itself to the unnatural movement and finally becomes capable of a considerable degree of adduction, a condition which, once initiated, becomes emphasized as a necessary result of the femoral convergence every time we stand and walk. And the vicious results are not limited to the knee. They are carried downward, causing pronation of the foot, abduction of its anterior part, and a descent of the tarsal arch. It is the lack of attention to a simple anatomical fact which creates simultaneously knock-knee and flatfoot, not the use of a certain foot angle, upon which so much printer's ink has been spilled, but which, in spite of everything, remains a perfectly natural posture for a Caucasian foot. It is carelessness in the transmission of the weight in lunges, jumps, vaults, dances, and like activities that causes the mischief. Incorrectly executed, these and similar forms of activities are the chief deforming influences acting on the lower extremities. Correctly executed, on the other hand, they become orthopedic means of the highest order. It goes without saying that it is among the girls that the use of these exercises shall be surrounded with most care and the progression be particularly slow, because of their smaller muscular power and great femoral convergence.

Let us now turn to another matter of even more importance, the maintenance of an erect carriage and the prevention of the common complex deformity of drooping head, round shoulders, flat chest, and protruding abdomen, which may be truly called the school deformity *par excellence*. It is the exaggeration of a normal resting posture arising out of school life, because school life engenders fatigue—fatigue, not because of the quantity of physical labor performed, but because of the one-sided character of that labor, because it is concentrated in a few regions instead of being distributed over the whole body. Some parts are overworked, others underworked. Both suffer. The child's nature demands movements in large quantities, not movements which necessitate sustained efforts but those in which the activity is constantly shifting from one part to another. Immobility, whether as rest or in strained postures maintained by prolonged muscular effort, is equally deleterious to the child. In school we confine the child, however, to a seat for hours at a time and demand more or less

absolute stillness in a given posture. The inevitable result is fatigue and lessened tone in muscles which should hold the skeletal parts in proper apposition to each other, but which, when exhausted, yield and allow the weight to fall upon the passive tissues. These in their turn change their structure, becoming elongated on the side of the strain and correspondingly shortened on the opposite side. With the prevalent work in front of the body, we have a general shortening of all the tissues in front of the shoulders and chest, while those on the hind aspect of neck and upper back, including the retractors of the scapulae, lengthen. Thus the head and the shoulders fall forward, and the spine curves in the same general direction. The static relations are thus changed and, to maintain the equilibrium, the weight is necessarily shifted backward by increased lumbar flexion and hyperextension in the hips. This is the typical development of the most common of all the school deformities and the one which at the same time is most detrimental to the normal health. For a time the child may correct it at will, but there soon comes a time when no effort of the lengthened and toneless muscles can even temporarily overcome the shortened anterior tissues. The deformity has grown fixed, and from now on it will require the hardest kind of prolonged labor on the part of the child, well and patiently directed by the teacher, to conquer it.

To prevent this condition, there need be introduced in the curriculum not only exercises to supply the quantity of activity necessary to maintain the child's general health, his organic vigor, but such as are specially designed for this particular purpose. In other words, whatever value we may ascribe to play, we must recognize that, after all, play is in its nature very largely imitative of present or ancestral activities, and consists, like these, to greatest extent, of efforts directed forward, and therefore unsuitable for the purpose we have in mind. To prevent unhygienic skeletal development there is required a form of activity which necessitates the greatest contraction in the muscles of the hind aspect of the spinal column and the adductors of the shoulder blades, and these in such postures as to prevent relaxation of the abdominal wall and extension of the anterior ligaments of the capsule at the hip.

It is true that play forms have been invented to serve this purpose to some extent (for instance archball), but I believe that we can all agree that the very nature of play means freedom and spontaneity, and that the value of any exercise as a play is in inverse ratio to its orthopedic effect. Nothing suffices for our purpose but gymnastics in its narrow sense. And to serve, gymnastics must be introduced from the very beginning of school life. It is argued that play forms are the only physical training suitable to the lower grades. I take issue with this opinion. The evils of which we here speak begin to make themselves noticeable from the time the child enters the school, from the time that it is confined to a chair or bench, and the warfare

against them must be carried on from the beginning, and must be continued right straight thru kindergarten, grammar grades, high school, and college. As it is at present, the damage has been done long before formal gymnastics are introduced, with the result that at the upper stages work must be done which belongs to the orthopedic therapeutist rather than to the orthopedic hygienist, if you will allow me those expressions. We must even in college repeat and re-repeat exercises suitable for the mental development of the eight-year-old child and which quite naturally are not only unsuitable to the adolescent but abhorrent to him, which explains a good deal of the lack of interest of which complaint is made. By a proper introduction of formal gymnastics in the lower stages, we shall endeavor to make the formality more and more unnecessary at the upper stages. The applied forms shall in the upper schools have the dominant position.

Simplicity must of course be the keynote from the beginning. Let the kindergartner receive such instruction as will enable her to recognize the essential external features of the erect posture. Let her devote one to two minutes three times a day to teaching this posture and its maintenance in simple forms of exercise, and this without curtailing the time set aside for play. Let the grammar teacher build upon this foundation, and we may be reasonably sure that the pupils issuing from the eighth grade either to business or to high school will do so without deformity. This I hold to be the chief orthopedic function of gymnastics in the lower grades, far more important than the efforts to correct deformities after they have been created by neglect. The great obstacle for this common-sense application of gymnastics lies in the prevalent opinion that the orthopedic value of gymnastics can be secured at any time by means of one or a few brief weekly lessons. This is a chimera.

Assuming a school year of thirty-six weeks, I would demand that for the first week three daily periods of one or two minutes each be devoted to accustom the pupils to assume rapidly and orderly an open formation in ranks. This can easily be done as a play. During this and the next succeeding week the very worst errors of postures should be corrected by help of hand whenever necessary. Particular attention should be given to avoidance of sway-back and strain in the shoulder girdle.

In the second week there should be begun practice in swaying forward so that the weight is carried on the soles of the feet, and this exaggerated posture should be maintained for its corrective influence three to five seconds before rest is given. Gradually it should be made clear that the fundamental standing posture should include a moderate degree of such forward swaying to be assumed on the command "attention," tho the teacher may even later for correction give an occasional admonition to "sway."

In the third week I would add an arm-raising sideways with particular attention to the avoidance of sway-back and ducking of the head.

From now on the number of the periods may very properly be decreased to two or one a day and the length gradually increased to four, five, up to ten minutes as new exercises are introduced.

In the fourth week we may teach the placing of the hands upon the hips without pushing the shoulders upward, the hands resting solidly on the iliac crests.

For the fifth week the new work should be heel-raising, and the next week there should be introduced foot-placings sideways with a complete transfer of the weight. A combination of this foot-placing with the hand-placing on the hips, variations in resuming the fundamental posture in one and in two counts, feet-changing, and such other changes as suggest themselves to the teacher will, if the prime condition of good form be insisted on, occupy the class for some three weeks more.

About the tenth week we may try standing hand-turning, to be succeeded during the next few weeks by bending the elbows after the arms have been raised sideways, this bending first to be done slowly but soon to be increased in speed so as to constitute a real arm-flinging, of course with insistence upon the immobility of the upper arms and head. This should be followed or alternated with arm-bending upward and arm-bending forward, with and without combinations of foot-placings.

In the second semester there should be added arm-stretching sideward after the arms are previously bent upward, head-bending backward, trunk-bending forward, trunk-turning while sitting astride a chair.

In other words, at the end of the kindergarten year, the pupils should, according to this plan, be capable of executing a little gymnastic program, like the following, and to do this with quite a good deal of vim and vigor. And if they can do this, they have postponed the initial stages of the common school deformities. They have at the same time acquired a control of their bodies which under present conditions it takes the college student without previous training nearer two than one month to acquire by work that is, and necessarily must be, disagreeable to him.

PROGRAM

Formation
Standing arm-raising sideways
Standing hand-placing on the hips with foot-placing sideways
Wing-stride-standing feet-changing
Standing head-bending backward
Standing arm-stretching sideward
Standing heel-raising
Yard (*c*)-standing arm-flinging with and without foot-placings
Wing-stride-standing trunk-bending forward
Wing-stride-sitting trunk-turning
Standing arm-raising sideways with heel-raising

It may be noticed that in this program there is no marching, no running, no jumping, no dancing, no play. The chief reason is of course that these forms are supposed to be and are abundantly used in the kindergarten. They may well be interpolated in the above program and should most certainly be used outside it both out of doors and inside.

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SECRETARY'S MINUTES

OFFICERS

President—H. L. Terry, state high-school inspector.....Madison, Wis.
Vice-President—J. F. Woodhull, professor of physical science, Columbia University
New York, N.Y.
Secretary—Jesse L. Smith, superintendent of schools .....Highland Park, Ill.

FIRST SESSION—Wednesday Forenoon, July 9, 1913

The meeting was called to order by President Terry at 9:30 A.M. in the First Congregational Church. In the absence of the secretary, H. T. Clifton, high school, Pasadena, Cal., acted as secretary *pro tempore*.

Helen C. Putnam, M.D., chairman of the Committee on School Hygiene of the American Academy of Medicine, Providence, R.I., presented the "Report of the Committee on Janitor Service."

After the reading of this report, upon motion it was voted to continue the committee and to investigate the possibility of having the outline of their report printed and distributed.

The following papers were next presented:

"Nature and Content of Science in the Rural School and Its Relation to Secondary Science"—Josiah Main, professor of agriculture, State Normal School, Hays, Kans.

"Danger of Overspecialization in Work in Science"—J. H. Worst, president, State Agricultural College, Fargo, N.Dak.

The Committee on Nominations, which had been previously appointed by the president, presented the following report:

For *President*—George R. Twiss, high-school visitor, Ohio State University, Columbus, Ohio.
For *Vice-President*—B. Schmick, Iowa State University, Iowa City, Iowa.
For *Secretary*—A. A. Upham, normal school, Whitewater, Wis.

The report was accepted and those named by the committee declared elected as officers for the ensuing year.

The meeting then adjourned.

H. T. Clifton, *Secretary pro tempore*

SECOND SESSION—Thursday Afternoon, July 10, 1913

The department met in joint session with the Department of Secondary Education and the Department of Manual Training and Art Education and was called to order in Assembly Hall by J. G. Collicott, superintendent of schools, Indianapolis, Ind.

The following program was given:

"What the Schools Can Do to Meet the Demands of Both Industry and General Science"—Ernest O. Holland, superintendent of schools, Louisville, Ky.

"How Far Should Both Academic and Manual-Arts Courses in the High Schools Be Bent to Meet the Needs of Specific Vocations?"—William B. Owen, principal of Chicago Normal School, Chicago, Ill.

"Report of Committee on the Improvement of Physics Teaching"—J. A. Randall, head of Department of Physics, Pratt Institute, Brooklyn, N.Y.

It was moved and seconded that the first three sections of the report of the Committee on the Improvement of Physics Teaching be accepted and further that it is the

sense of this meeting that the plans set forth therewith should be carried out, and that the Executive Committee of the National Education Association should provide funds to support these plans, including the circulating of blueprints, direction sheets, etc., the issuing of a series of monographs, and an exhibit of scientific, commercial, or other objects helpful to the advancement of science teaching to be presented by the committee in conjunction with the Panama-Pacific Exposition.

This motion was unanimously passed.

Arthur L. Williston, Boston, Mass., then made the following motion which was seconded:

That the fourth section of the report in reference to action to substitute a quality competition in science equipment for the present price competition be accepted and referred to a special committee to be appointed by the incoming president of the Department of Science Instruction.

After some discussion as to the powers of the committee, it was agreed that no further instructions should be given, but that such a committee could not take any action binding upon the National Education Association without reporting to the department and receiving definite authority.

The motion was unanimously carried.

The meeting then adjourned.

IRA M. ALLEN, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

REPORT OF THE COMMITTEE ON JANITOR SERVICE

The Committee on Janitor Service was appointed by the Department of Science Instruction at the Boston meeting of the Association, 1910, following the discussion of a paper on "The Practical Application of Biologic Science in School Administration: The Problem of Janitor Service," since published in the volume of *Proceedings* for that year.

The committee had the privilege of providing the program for one session of the department at San Francisco in 1911. Here Professor C.-E. A. Winslow, of the College of the City of New York, gave a paper on "The Scientific Basis for Ventilation Standards"; Professor Frost and Miss Armstrong of the University of Wisconsin reported interesting studies under the title "Bacteriological Tests of Methods of Cleaning"; and Professor Frost outlined his brief course for janitors at the University, not yet at a stage to be estimated.

The committee believes that there is no occasion for asking for appropriations for any exhaustive study of janitors' work. It is well known that:

1. Janitors are given no opportunity for training in sanitary methods.

2. Some janitors are required to have engineers' licenses.

3. Their salaries often equal and frequently exceed those of teachers, sometimes of principals and of other workers who are carefully trained and tested.

4. The details of dustiness, temperature, humidity, air currents, cleanliness in schools, on which largely depends health of school population and, thru it, of the nation are in the hands of these untrained housekeepers and their untrained supervisors.

5. The unstandardized details of this housekeeping have helped develop "occupational diseases" called "school diseases," by which we mean anemia, adenoid and catarrhal conditions, disorders of the nervous system, all especially predisposing to tuberculosis, as well as to the contraction of other diseases and to their more serious results.

The committee further decided that its object would be best served by presenting at this time suggestions so brief as to invite reading, so practicable as to invite adoption, and designed to lead to a general definite standardizing of janitors' work.

To secure effective and intelligent co-operation of school officials—political, educational, janitorial—in sanitary living at school it is indispensable that actual as well as desirable conditions be known. The first step in improvements in any direction is to collect the facts.

Every building, as every room in it, has its own conditions to be learned and controlled. They can be learned, and some of them in some places more or less controlled, with least expense and greatest effectiveness when children's co-operation is enlisted.

The expense is comparatively negligible.

"Effectiveness" is along three lines, as follows:

1. Practically constant supervision such as all good housekeepers find necessary in their homes.

2. Preservation of permanent records of sanitary details for inspection by school officials and others, to take the place of our present guesses and opinions as a basis for establishing conditions more favorable for health.

3. The interest of future voters and makers of homes and of communities in sanitary details by training in regulating them and by habituating to desire them.

The method proposed for securing pupils' co-operation has already in one or other of its phases been observed in successful operation at some time during the last ten years in individual schools.

The committee recommends that for each room used in a building, including corridors, basement, assembly rooms, a group of children be appointed as health officers to serve for a time so limited that every pupil shall have a term of service, perhaps a fortnight or month, during each year.

In elementary grades this office may be a part of "nature-study," "physiology and hygiene," "domestic science." In high schools it may be connected with physics, chemistry, biologic science, home economics, or physiology and hygiene.

The sanitary details to be reported by these health officers are temperature, dustiness, relative humidity, air currents, and cleanliness. For corridors and basement, relative humidity does not need to be regularly reported.

Temperature.—The proper place or places for thermometers shall be determined by the officers, and instruments shall be occasionally standardized by them. The officers shall read them periodically (hourly intervals are advised for classrooms), record the readings in a substantial book, and

chart them on a blackboard reserved for this purpose (after the manner of nurses' clinical charts), so that pupils, principal, janitor, and visitors can see perhaps a week's record at a glance.

When conditions permit, health officers shall readjust heating sources (registers, steam pipes, stoves, etc.), ventilators, or windows to maintain proper temperature, which, when artificial heat is used, should never exceed 68° Fahrenheit. Children as young as nine years can usually do all this acceptably.

Dustiness.—In high schools where there is an efficient department of biology or of home economics, dustiness can be measured or estimated by cultures or by the sugar method recommended by the Committee on Standard Methods for the Examination of Air. The standard is 2,000 particles (visible under a two-thirds inch objective) to a cubic inch of air.

In elementary schools the method suggested for the present is that of the good housewife, wiping surfaces with a clean cloth. If dusting is properly done nothing is wiped off. Floor, woodwork, and furnishings should be as immaculate as in the best-kept home or hospital. This test should come at the beginning of the session daily. For purposes of investigation, dustiness may well be re-examined at a later hour.

Health officials should be responsible for the moist erasing of chalk, but pupils should not be required to dust rooms. Officers should record sweeping of rooms or corridors while pupils or teachers are obliged to use the rooms. Severe penalties for this violation of personal rights should be enforced by school boards.

Elementary pupils over eight years of age can do this work, including record-keeping.

Stirring up dust by either sweeping or dusting should not be allowed within an hour before school opens, nor while duties require pupils or teachers to be in the building, nor with closed windows or other omission of cross-drafts to carry it outside. Exceptions to this rule may be made only in accordance with examinations of dustiness.

Relative humidity.—Officers over eleven years can be taught to use safely the whirling wet-dry bulb thermometer recommended by the United States Weather Bureau. The danger of breaking is lessened by tying to the back a stick projecting a few inches beyond the bulbs. One instrument is enough for an ordinary building.

Relative humidity should be recorded and charted about a half-hour after the session opens. It can well be repeated later also. Where possible, officers shall readjust artificial sources of humidity (evaporating pans, steam pipes, etc.), or windows, to maintain relative humidity as near 50 per cent as possible.

Air currents.—When ventilating or fresh-air flues have no current indicators of their own, officers should measure currents with an anemometer (one is enough for the usual building), or estimate them with candle or joss stick. Pupils over eleven can use them, perhaps younger.

The effectiveness of air currents is best learned by comparing the smell of schoolroom air with that out of doors—the standard of freshness. Air currents and freshness should be recorded at least once at the middle of each session. Officers should make such readjustments of windows or ventilators as are indicated.

Cleanliness.—Cleanliness of wash-bowls, water-closets, possibly of other parts of building or yard, should be recorded once each session. Dirt on windows sometimes diminishes illumination one-quarter to one-third, measured by a photometer. The instrument is costly, and until a less expensive method is devised the opinion of health officers can be given. Dirty windows are important in rooms that are badly ventilated or specially exposed to smoke and dust. Such windows sometimes need washing once in two weeks. Pupils over eleven, possibly younger, can do this reporting.

General suggestions.—Health officers from older grades can be appointed for service in rooms where pupils are too young for any special detail.

When a fault is found beyond pupils' function to remedy, it should be reported immediately to the proper authority, probably the principal. It is wise never to "interfere with the janitor." This report and the result following should be stated in "Health Officers' Permanent Record."

Some, if not all, of these exercises in practical sanitation can be undertaken quietly at any time by any teacher in charge of any room. The accumulated data will prove invaluable. It is the practical first step in reducing "school diseases" and tuberculosis, which increases all thru school years (except in open-air schools), and up to thirty or thirty-five years of age, and among teachers has a mortality rate higher than among the general public. It proves so useful and interesting where begun that other rooms soon fall in line. These facts will help demonstrate that school housekeepers like others must be trained in sanitary methods.

In addition to the references already mentioned the committee advises as supplementary reading:

"Report of the Committee on Standard Methods for the Examination of Air," *American Journal of Public Health*, 1910, 1912

Hill, "Stuffy Rooms," *Popular Science Monthly*, 1912

Putnam, *School Janitors*, American Academy of Medicine Press, Easton, Pa.

Chapin, *Sources and Modes of Infection*, Wiley and Sons

Respectfully submitted,

Committee { Helen C. Putnam, Providence, R.I.
George R. Twiss, Columbus, Ohio
Fred H. Cowan, Boston, Mass.

Advisory expert in sanitation:

C.-E. A. Winslow, associate professor of biology, College of the City of New York; curator of public health, American Museum of Natural History; chairman, New York State Commission on Ventilation, New York, N.Y.

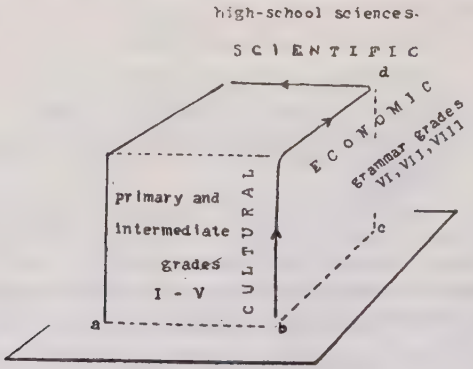
NATURE AND CONTENT OF SCIENCE IN THE RURAL SCHOOL AND ITS RELATION TO SECONDARY SCIENCE

JOSIAH MAIN, PROFESSOR OF AGRICULTURE, STATE NORMAL SCHOOL, HAYS, KANS.

Science is organized knowledge. It is the purpose of the high school to organize knowledge. Below the high school, nature subjects should be presented in a concrete and unorganized form. The scientific method consists of several distinct steps, beginning with observation and closing with generalization. Only the first of these is appropriate to the nature work below the high school. Therefore, elementary science, being disassociated, lacks the cohesion that will make logical development possible in a paper of this character. Fortunately there is a unifying principal furnished by genetic psychology, which we call the culture epoch theory. Use will be made of this theory as a means of treating this subject.

The genetic psychologist recognizes three distinct phases of development during the school years: first, the transition, second, the formative, leading up to the adolescent, the third. The first includes the primary grades, the second the intermediate grades, and the third the grammar and high-school grades. In the first the child represents an early period in race history, in the second more recent, and the third is prophetic of the future racial development.

These phases may be represented by three adjacent faces of a rectangular solid. In the case of nature subjects, this solid represents a limited



portion of nature, and the three faces correspond to three points of view which may be had. During the transition stage it is viewed much as our early ancestors viewed it, and the economic present cannot be appreciated. The purpose of nature teaching in these years is cultural.

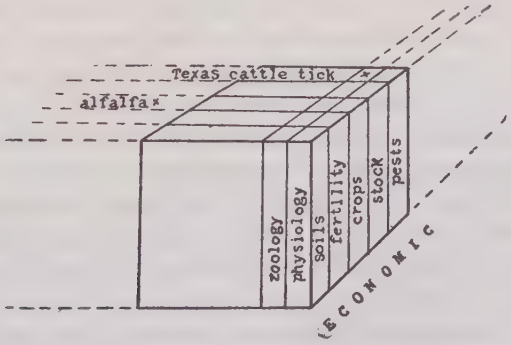
Among the lowest organisms, thought is motion. With infants thought must be accompanied by motion. Later life may teach us to inhibit motion and substitute mere muscular tonus, but man thruout life thinks with his muscles. Therefore, to educate his mental powers we must supply appro-

priate muscular exercises, and the appropriate exercises are those which built up the brain which the infant has inherited from his remotest ancestors. These exercises pertain to his struggle for existence, and include more particularly the earlier vocations which supplied him food, clothing, and shelter. Hence we use nature-study and the school garden as a means of his early mental development. Early vocations, therefore, dictate the appropriate science material. Carlyle had this in mind when he said:

> Properly speaking thou hast no knowledge but what thou hast got by work, all else is a mere semblance of knowledge, a thing to be argued in the schools, a thing floating in the clouds till we try and fix it.

Earl Barnes in his *Studies of Children's Interests* corroborates this when he finds that before adolescence children define objects, not in terms of structure, but in terms of what they can do, or what they are used for. In adolescence they prefer to define by terms of structure. Most of these early racial experiences come under the term agriculture, and as the useful of one age is outlived in the next, its value, necessary for educational purposes, is cultural rather than economic.

The second face of the solid, the economic, covering grades six, seven, and eight, represents later formative and early adolescent stages. The child reaches a kind of early maturity and the most active years of his life. He is interested in all local utilities, and were he to choose a vocation it would ordinarily be a handicraft or manual vocation. He is interested in all the utilities of his environment, and properly to be trained in science work he should be made a producer. And the study of the best way to get



the product and where its merits reside, plus side excursions of youthful curiosity, form the strongest incentives for science work in grades six, seven, and eight. With the rural child this will be largely biological, with the urban, more physical.

The following exercises are planned to illustrate what should be done in the science work in the rural school at this stage:

First, we have a corn plant growing in nodes and internodes, with the leaf at each node, in the axil of which is a bud. The upper bud or shoot

grows to form an ear. The top of the stalk produces a tassel. The former is composed of pistillate flowers, the latter of staminate. Should the buds at the bottom of the culm develop they will form suckers, the only natural difference between the sucker and the ear being in the origin. The sucker grows in internodes terminated by an ear which ends in a tassel. By breeding, we have developed a plant that produces two ears, rather than one ear and a worthless sucker. Compared with wheat, we find some internodes of the latter greatly reduced in length, so that the buds all develop, forming what we call the stool—a primitive condition to which the suckering of the corn relates. Thus, we not only teach the botany of the corn plant, but get an intimation of what man was doing during the prehistoric ages that must have elapsed while the corn was being bred up to its present perfection. While the rural early adolescent is hopping clods behind a cultivator that had *locomotor ataxia* during the hot days of June he has the right to this knowledge.

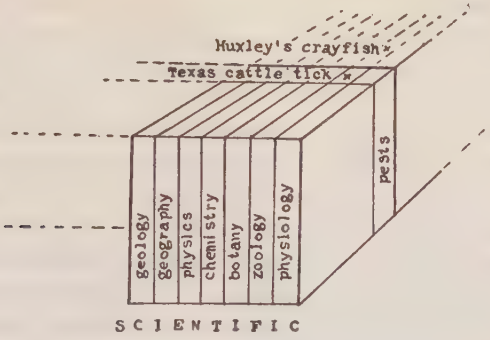
Why is he plowing corn? First, to conserve moisture, a matter of physics, which should illuminate his work. Secondly, to kill weeds, and in the study of the worst weeds which he must find we get representatives of eight or ten of the commonest plant families, each of which is also represented by plants of the greatest economic value. Thus, like ourselves, there is a black sheep in every family, and there are undeveloped possibilities in every weed.

Among insect pests of corn also may be found representatives of five of the seven Linnean orders of insects, whose control depends on the knowledge of their life history, locomotion, and mouth parts.

Similarly, structure of seeds and seedlings and how seeds come up, while matters of economic importance to him, are fundamental to his correct science work later in the high school. Where plants take food, as shown by a staining solution, where the root grows in length, the parts of the root, osmosis, as shown in a cut potato or dandelion stem, explain how the corn plant is nourished. The starch which fills the kernel may be identified by the iodine test, which will also show its origin in the green leaf. With starch as a basis we have the origin of the energy-giving nutrients and open the whole question of rations and digestion.

Thus the corn plant may be made the means of giving concrete information in physics, chemistry, botany, zoölogy, and physiology. In a similar way the study of the horse is an excellent means of teaching the bones, tendons, and ligaments, defects of which constitute most of the ills to which horseflesh is heir. The study of the cow gives us physiology of the skin, of milk secretion, and introduces the subject of nutrition again. The cuts of beef form excellent material for teaching muscle structure, since marbling, texture, and tenderness are factors of quality in beef which relate to the infiltration of fat into the muscle and the hardening of the con-

nective tissue due to age, exercise, improper development, and inferior breeds.



With this foundation we are prepared to go to the scientific organization of high-school science as indicated by the third face of the cube. It is of the greatest importance that we keep within the cube, or that we use as far as possible the same materials thruout the primary, the intermediate, grammar, and high-school grades. To try to teach an unfamiliar scientific principle by the use of unfamiliar scientific materials is like trying to find the value of two unknown quantities from a single equation. If $x+y=11$, the only value we can get for x is $x=11-y$, and the only thing we have learned is a meaningless formula. There may be some materials outside the common mass, such as pussy willow for cultural purposes, alfalfa for economic purposes, and Huxley's crayfish for scientific purposes, necessary for proper teaching of the three phases, but a closer correlation of agriculture with science is necessary to the salvation of sciences to the high school.

DANGER OF OVERSPECIALIZATION IN WORK IN SCIENCE

J. H. WORST, PRESIDENT, STATE AGRICULTURAL COLLEGE, FARGO, N.DAK.

It is not my purpose to discuss this subject from the viewpoint of the scientific enthusiast. It is a well-known fact that a single branch of some particular science is sufficient to occupy the lifetime of the earnest investigator who may die at last with his work but scarcely begun. Research is tedious work, at best. Once demonstrated, however, scientific facts not only illuminate and enrich the understanding but their application to the industries of life facilitates labor and cheapens production. The body of scientific knowledge has become so vast and simplified and its usefulness so universally recognized that its more general dissemination among the masses is demanded.

A distinction must be recognized, however, between the investigator, as such, and the teacher, for the investigator should not be discouraged from

the most intensive specialization. The average student, on the other hand, desires a knowledge of science, as a rule, for practical purposes and for immediate consumption. For students in general, therefore, the instructor should teach science in usable form; that is to say, in the form that will best serve the student's vocational needs—that will connect the student with life. And as most young men not preparing to enter college will, by force of circumstances, pursue some productive calling, the science subjects that bear directly upon their vocational problems should take precedence over—should certainly be given equal emphasis with—subjects merely cultural or formal. The world's work must be done and in so far as science training enables men and women to become more skillful and hence more useful, it has a mission in general education. There is little danger of overspecialization where the training points toward manual utility; where the purpose to fill some industrial position with efficiency is clearly understood, and the desire to enjoy both the labor and the results of labor is the controlling impulse.

The new spirit of democracy is demanding of the public schools men of character who also are able and willing to give an equivalent for what they would possess. The public is beginning to recognize that intellect applied to grading a roadbed, managing a loom, or operating a dairy plant is as dignified and quite as respectable as when exploited for the purpose of clearing a known criminal from the penalties of the law or giving advice that enables predatory concerns to loot the public without being caught. But where the theoretical teacher clouds the student's understanding with technicalities and impracticable classifications for want, himself, of experience in practical world-affairs, there the danger lies. As well devote the major part of a student's education to ancient history and the dead languages as to scientific research that has no bearing upon his aptitudes and no relation to his future interests. Chemistry as chemistry is one thing, but chemistry as applied to practical agriculture or other industrial pursuits is quite a different thing. And chemistry as understood for practical usefulness might not, on examination day, admit of a passing mark, while another's chemistry would pass at 100 per cent and yet have but little value, save as a mental acquisition. This is true of science in general. The chief danger of overspecialization lies in the fact that too many educators and textbook authors have such slight acquaintance with practical things, with creating wealth from original sources, or with the mode of life that most people must live.

Science in the public schools, therefore, should be emphasized to the extent that its application will meet the particular industrial needs of the community. What is applicable to one community, however, may be out of place in another community. The laity, the common people, the men and women who must perform the community work, whatever may be its character, are the ones to be considered rather than the views of the peda-

gogical theorist. The science taught should be of the kind that can be applied to meet the demands of the locality, whether it be agricultural, manufacturing, or what not. Local conditions and not tradition should govern if the public schools are to serve local community needs.

There are certain general considerations, however, applying to the choice of subject-matter, its quantity, the particular facts organized in subjects, and methods pursued in the curricula of secondary schools, especially with reference to industrial and scientific branches.

1. The nature of the adolescent is to be considered. The intensive study of science at the high-school age is doubtless less desirable than a broader and more human study of the aspects of nature. It is held, for example, that there should be very slight use made of the microscope and scientific classifications, these being uninteresting to youth of high-school age and more properly to be given in the college or university. It is believed that science in our high schools has become altogether too differentiated, too technical, and too destitute of real attractiveness for secondary-school pupils. Such students are not so much interested in exact measurements and rigid demonstration as in the uses of things and the living and open aspects of nature. While there is not likely to be too much science of the usable and interesting variety, there is believed to be altogether too much in the high schools of that science which would appeal more particularly to the specialist.

2. We have come to a point in the evolution of our public-school system when perhaps the paramount need is a stricter evaluation of the facts offered. It has been altogether too readily assumed that the separate items of knowledge given in the various sciences are intrinsically valuable. As a matter of fact, there are the widest differences among facts as to their value in helping the individual to adjust himself to his environment. Many facts which are logically a part of the extended sciences have but slight or no actual value in the life of the individual. It accordingly comes about that a student who receives 100 in a given subject in school may stand zero when confronted with actual situations out of school. The misfit information of the older classical institutions became notorious, but is there not as great a misfit when a person who has studied the tadpole, or the interior structure of the cat, for months, is unable to distinguish breeds of cattle or judge the value of work horses that pass on the street? And is not this disappointing aspect of science teaching the result of applying college methods to high-school conditions? Is not disappointment due to what might be called the classical idea in science? Is there not, therefore, need of going thru our various offerings in science in the secondary schools and winnowing out such material as does not meet tests of applicability in the home, on the farm, or in the factory?

3. There remains the large social question of what proportion industrial and scientific studies should bear to the total fund of knowledge offered in

the public schools. Scientific and industrial branches prepare especially for producing wealth. Our civic, political, and social sciences bear especially upon the distribution of wealth; while the fine arts, ethics, literature, etc., promote the interests of the individual as a consumer. Any degree of overspecialization in the high school which disregards the social setting of the student in his after-life is evidently unfortunate. While the production of wealth is a paramount social aim and the ability of the citizen to perform his individual task with efficiency and pleasure is an important function of the public school, yet the importance of discriminating and alert citizenship and well-ordered home and community life must at the same time be given due consideration.

Science teaching in the public schools, moreover, can readily be made to serve the double purpose of developing general culture and promoting efficiency in vocational occupations. Science, therefore, should not be taught in secondary schools primarily for the purpose of imparting scientific knowledge for its own sake or for gratifying the students' curiosity. Where, for instance, economic plant growth is the end sought, an accurate knowledge of the physiology of plants, their development, diseases, natural enemies, and the effect of fertilizers and methods of tillage required for their production, etc., is the chief consideration. This knowledge may be considered superficial, from the scientific viewpoint, yet for the average student in the country high school or consolidated school it is about all that can be given within the time that may be allotted to the study of botany and do justice to other subjects of equal importance. On the other hand, beginning with the study of algae and proceeding to the consideration of osmosis and cellular structure, and making free use of the microscope are calculated to awaken keen interest, yet the student is apt to overlook the plant as a whole, and its economic production as well, on account of being absorbed in the study of its structure and its theoretical relationship to other plants.

One of the purposes of introducing science in the public schools is to lead the student into a love of nature; to create an interest in neighborhood phenomena.

For agriculture, and especially for elementary agriculture, as adapted to the public schools, I question whether it would not be better to teach the subject direct rather than by strict classification, separating agriculture into botany, zoölogy, chemistry, physics, geology, etc., and presenting each subject not only separately, but at different periods of time and by different instructors. The temptation is always present, even then, for the impractical teacher to specialize on some particular branch of science, usually the branch which he likes best and about which he knows most. By so doing the relation that one science bears to others is not so well understood and the student too often fails correctly to correlate, for real usefulness, the scientific knowledge he attains from several sciences. This is more especially noticeable when they are taught as separate and distinct subjects

by different teachers. For subjects like agricultural science depend upon practically all of the sciences, and they cannot so well be taught separately in the public schools by different teachers.

These matters are not being urged upon academic grounds but, instead, because of the fact that so small a part of the science teaching in our schools is designed to enhance the usefulness of the pupil or enlist the enthusiastic support of the school patrons.

The number of teachers qualified to teach science from the standpoint of the efficiency of the student seems to be lamentably small and the educational machinery for their production wholly inadequate. The instructor fresh from the college laboratory rarely understands or is in sympathy with the social and vocational needs of common, everyday life. Too often the instruction offered is adapted for students having college ambition but barren in service for the many who must immediately engage in industrial pursuits.

But few schoolgirls can hope to obtain a college education. A comparatively small number can hope to complete a secondary education. For such, however, the secondary instruction should not gorge them with a mass of knowledge that has no application to the lives they are to live. The scientific facts embodied in home economics, touching as they do the various duties that fall to the lot of wife and mother, will not only lighten the burden of labor but at the same time substitute interest and pleasure where otherwise would be drudgery. No amount of language grind, history, or higher mathematics will relieve the situation as will the science that bears upon homemaking.

To make the necessary room for science in the public schools, many traditional preparatory subjects, however, may be abridged with profit by eliminating much that is obsolete or mere surplusage. In doing this, it would not be amiss for the teacher to get the viewpoint of the laity—to get close up against the specific problems to which modern education should be made applicable in order to meet fairly the demands of modern civilization.

WHAT THE SCHOOLS CAN DO TO MEET THE DEMANDS OF BOTH INDUSTRY AND GENERAL SCIENCE

E. O. HOLLAND, SUPERINTENDENT OF SCHOOLS, LOUISVILLE, KY.

All of us will agree that no secondary school of the country can be said to fulfill its highest function if it does not develop in the students sound and high ideals of character and citizenship. But these ideals are not sufficient; they must be reinforced by the ability of the high-school graduate to take his place in the world's business activities.

Already the American high schools have tried indirectly to adapt their work to the demands of the community by increasing the number

of electives, thereby permitting the students to select those subjects which are especially adapted to their ability and future needs. However, as I have indicated above, this was not sufficient. With the exception of the commercial branches, manual training, and household economics, the subjects were so taught that it was difficult for a child to make any application to his own environment and life. Even in the more practical sciences the instruction tended to become formal; a definite set of facts was presented by the teacher, but only the most inquiring pupil could discover any connection between these facts and the large world outside the schoolroom, in which each individual would soon be compelled to take his place.

Because of the insistent demands and criticisms of the industrial world and a realization on the part of the school men that things were not right, we now have the beginning of an attempt on the part of many of the leading secondary schools to modify their science courses, in order to give better preparation to the students who expect to enter the industrial world. For instance, the secondary school of the Kansas Agricultural College offers but one term (five months) of a course designated as introduction to science. Immediately after this course has been given, the girls of this high school take up the study of household physics and chemistry, and the boys agricultural physics and industrial chemistry. It is interesting to know that Professor E. L. Holton, director of this secondary school, is firmly convinced that the boys and girls taking work in the applied sciences learn more of pure science than they would if the instruction were entirely theoretical in character. He believes that the theoretical side can be acquired at the time the practical application is made. Yet even in this school, an integral part of an institution of higher learning, it is assumed that the graduates will not go to college, tho the teachers in this school believe that the graduates of this secondary school are as well equipped for college work as are the graduates from the high school which devotes much time to the traditional courses in the various sciences. All of us will be interested in watching this experiment.

The instructors in chemistry in the Louisville (Kentucky) manual-training and male high schools have been trying during the past three or four years to encourage a practical application of the facts obtained in the chemistry laboratory. The theoretical courses in this subject are still given, but a small group of students have an opportunity in the laboratory to do special work which will prepare them to take positions in some of the factories in the city requiring the services of young men with a practical knowledge of chemistry.

I think a still better illustration of the practical use to which a knowledge of chemistry can be put can be cited in the case of the interesting and significant work which has recently been done in the chemistry laboratory at the Westfield (Massachusetts) normal school. To many of you this work

is already quite familiar. With the assistance of the instructor of chemistry the normal-school students have made many analyses of food products and drugs. This has been of great value in enforcing the pure food act, since it has aroused the people to a realization of the tremendous importance of this law. Moreover, the young women attending this normal school will be able to better living conditions in the various communities, since their teaching will be more practical and their pupils will be able to adapt themselves more quickly and effectively to the demands of the various industries when they take positions in the factories and shops of that state.

Thruout the country a practical application of several of the sciences—chemistry, physics, and botany—is being made in the rural high schools where the elements of agriculture are taught. It is true that the college professor of chemistry might say that the amount of time devoted to the instruction in chemistry is too meager; that in turn would be the complaint of the teachers of physics and botany; but after all, the instruction the students receive in the subject of agriculture will probably be of immensely more economic and social value to the various communities concerned than if much more time were devoted to the formal instruction in the separate sciences.

Superintendent Boynton of the public schools of Ithaca, N.Y., has arranged a number of science courses in his high school, which aid the pupils to meet the industrial demands of that community. The pupils enrolled in these courses are encouraged to visit the manufacturing plants of that city, in order to see what practical application is made of the sciences which they are studying. Furthermore, the courses in physics and manual training provide for the drawing of plans and the erection of a miniature house and the electric wiring of the structure. After the pupils have taken these courses, they are able to do the ordinary electrical repairing needed at home, and occasionally a boy undertakes the installation of the wiring system for a residence in that city. Later it is possible for him to take employment in one of the electrical supply houses and make that kind of work his permanent vocation.

In a number of other high schools in this country there is a tendency on the part of the authorities to encourage the boys and girls to take positions in the various industries for the summer months. Occasionally, too, a number of the teachers in these high schools take up work in some of the shops and factories in the city in order to see what practical application can be made of the science courses they have been presenting to the boys and girls in the local high school, during the regular school term. Of course, all of this is experimental in character and a good many mistakes will be made, but in the end it indicates that a number of the leading high schools in the country are dissatisfied with the present high-school curriculum, and believe that such changes should be made as will enable the

boys and girls attending these schools to prepare themselves more thoroly for the work that they will do at the end of their school life. Frequent conferences should be held between the teachers and the managers of factories and shops in order to see precisely what the schools can do in order better to prepare boys and girls for their life's work. By such means, the high-school curriculum will become vitalized, attracting more pupils and thereby adding to the economic efficiency of the boys and girls who leave the classroom for the shop or factory.

At no time will these courses of study become fixed or crystallized. That must be clearly understood. As the life of the community changes and the demands of the industries are modified, additional changes must be made in these courses of study, and I believe that we can agree that the science courses in our schools can meet as fully as they have in the past the requirements of our institutions of higher learning and at the same time more adequately meet the practical demands of our industrial life. In no sense of the word will these courses be looked upon as preparing students simply to meet college requirements or to do work that has been subordinated to the petty demands of any special industries. They will be fundamental courses that are sufficiently scientific and theoretical in character to give the students the outlook into the science itself, and, upon the other hand, practical enough in character to enable the students to adapt themselves in an intelligent way to the general demands of industry.

Possibly I can summarize the point of view I have when I say that the science courses in our high schools should provide the following for their graduates: first, an understanding on the part of the students of the fundamental facts of science, and second, some skill in the application of what they have learned to the demands of the industrial world.

The illustrations I have given of attempts to modify the science work to meet the demands of industries have been drawn entirely from the fields of secondary and higher education. However, we have yet to deal with the more complex problem of modifying the science work in the upper grades of our public schools in order that the thousands of boys and girls, who will never be able to enter the secondary schools, can be given better preparation to meet the vocational demands of today. The experiments that are being conducted in the upper grades, looking to better adjustments between the schools and life's demands, are to be found on every side. Most of us are familiar with what is being attempted by Commissioner David Snedden, of Massachusetts. Because of the tremendous mortality in the school enrollment of that state at the end of the compulsory age period, the Massachusetts Board of Education is conducting a series of experiments in a radical modification of the upper-grade work. In these experiments, as we know, some of the schools are developing a part-time scheme, such as is to be found in Fitchburg, Mass., while other schools are working simply with a modified course of study, where the boys and

girls are in attendance every day until they leave school to take up work in the shops or factories. I believe that I am right in stating that Commissioner Snedden is convinced that a radical modification of our course of study must be made for all children after they reach the age of twelve, regardless of where they may be in their school work. This of course is to apply especially to children who have decided to leave school at the earliest possible moment.

At the beginning of the next school term in Louisville, Ky., and in co-operation with a special committee of the Consumers' League, we hope to conduct an experiment with forty or fifty boys and girls who are at least two or three years over-age for their grade and who will probably remain in school for but one or two more years. We shall offer rather practical work to these boys and girls in bookbinding and printing and we shall have a teacher so to modify the ordinary course of study that it will be best adapted for this pre-vocational work. The work in English and arithmetic, for instance, will apply definitely to the problems that arise in the shop. Within a year or two we shall be able to collect some data which will enable us to work more intelligently hereafter with retarded children, and with those who believe that they cannot afford to take up high-school work.

This experiment in some respects is no more radical than the experiments that were tried in the western part of Indianapolis, Ind., eight or ten years ago. In this school it was discovered that a large number of the boys and girls did not complete the elementary-school work. Furthermore, it was discovered that these boys and girls entered various industries, with no practical skill in the work that they were called upon to do. At once, double the amount of work in manual training and domestic science was offered the boys and girls in this school. Furthermore, additional pre-vocational work was offered them in bookbinding and printing. Instruction in the requirements of the printer's trade was provided by getting one of the leading members of the Printers' Union to assist the supervising principal in directing the pupils in this special work.

Quite naturally some of the boys and girls doing this pre-vocational work discovered at last that they desired to finish the elementary school and take up studies in one of the high schools of that city. The record made by these pupils in the secondary school seems to prove conclusively that these pupils were as well prepared to meet the demands of the ordinary high school as were the pupils who had devoted much more time to the traditional subjects of the elementary-school curriculum.

The foregoing discussion shows that the schoolmaster must go out into the industrial life of a community and learn at first hand what is expected of the young people when they leave the schools. Then he must have sufficient courage and initiative to do two things: first, make such changes in the course of study as will give better preparation to the children

who must enter the vocations at an early age; and, second, make possible for any child to continue uninterruptedly his course thru the grades, the high school, and the university.

Finally, may I venture one additional suggestion? We must not forget that the economic and social conditions in America are distinctly different from those in England, France, Germany, and other foreign countries. The successful experiments in vocational training which have been made in the European countries are interesting and significant, but in the end we must conduct our own experiments and make such modifications in our methods of instruction and courses of study as will be especially adapted to our own needs.

REPORT OF THE COMMITTEE ON THE IMPROVEMENT OF PHYSICS TEACHING

J. A. RANDALL, HEAD OF DEPARTMENT OF PHYSICS, PRATT INSTITUTE, BROOKLYN, N.Y., CHAIRMAN

It seems particularly fortunate that this preliminary report is to be given before this joint session of the Departments of Secondary Education, Manual Training and Art Education, and Science Instruction of the National Education Association. A most important portion of the plan of work depends for its ultimate success upon the co-operation of the manual-arts teachers with our secondary science teachers. This meeting accordingly brings together all the interested groups of teachers.

It is also especially appropriate to present this preliminary report at a time when Mr. Arthur L. Williston is president of the Manual Training Section, since it was largely due to his clear, farsighted vision and advice that this work was initiated and carried on.

The plan of this work is in full harmony with the general spirit of protest at the inadequacy of papers and talks as a means of effecting genuine reform or progress in educational matters. Neither this association nor any other like it will hold the attention of all of the teachers all of the time if its chief function is to conduct meetings devoted to literary papers and orations. What the mass of the thinking and working teachers want is organization for the purpose of gaining those advantages which come from co-operative attack upon common problems. Teachers meet to unite in the interests of greater service and we have discovered that papers do not satisfy this demand any better than the lecture in itself constitutes an adequate method of student instruction. The aims and theory of education which should govern physics instruction are being stated by another committee. This committee, the Committee on the Improvement of Physics Teaching, is therefore devoting itself to helping teachers realize the aims and ideals. In forming judgment as to the value and adequacy

of the plan of work which is being presented, it should be remembered that it is proposed to devote the energies of the committee to doing things that will reach the physics teachers and help them to improve the spirit, aims, and methods of instruction. We have turned from the usual plan of committee work, and hope to postpone the customary report until our recommendations have been tested and found successful in a large number of schools.

SECTION 1

The committee is acting as a bureau of exchange of new laboratory direction sheets and new designs of equipment for the physics laboratory and lecture table. These designs are in every case developed with the expectation that the article will be constructed in the school shops from material that is easily obtainable.

During the last year, over 10,000 blueprints and 14,000 direction sheets were distributed to about 800 physics teachers. The plans and some of the recommendations of the committee have become known to a much larger number of teachers thru such meetings as this and thru published articles in current magazines.

Before the joint committee was organized, Professor M. Thomas Fullan, of the Alabama Polytechnic Institute, had placed the following plan in operation in several southern states to enable some of the small schools to secure, cheaply, physical equipment; and your committee has adopted it. This plan consists of testing all sorts of common, everyday commercial articles and models of commercial articles as objects of instruction. We have hoped that we might thus vitalize teaching by giving it, if not a vocational motive, at least an atmosphere more suggestive of workaday life than of the research laboratory.

Until yesterday I had not intended to read you any of the letters, scores of which have come to me from teachers, expressing appreciation of our work, but I shall include a single typical one which was forwarded to me here.

DEAR SIR:

I received the blueprints and was able to use some of them to splendid advantage in my work. They are a great help and put life into the work. The students took greater interest in them than in their textbook work. "It seems more like doing something worth while," one boy said.

No other justification of this work than that offered by two hundred such letters should be necessary.

SECTION 2

The committee proposes to edit a series of monographs written by technical and industrial men who are manufacturing instruments, machinery, or other equipment, which may be used as objects of instruction in

the schools. The purpose of this series is to give the teachers as far as possible the benefits of a visit to the factory of the manufacturer and the benefits of an acquaintance with the business men who are operating the factories. A copy of "Monograph B-2," printed by the Western Electric Instrument Company, of Newark, N.J., will accompany the *Proceedings* and copies are available for all who are present. "Monograph B-1" is issued and states the plan of the series.

The following monographs are in course of preparation:

No. 3. *The Edison Storage Battery.* The Edison Storage Battery Co., Orange, N.J.
No. 4. *Hydraulic Devices and Machinery.* The Gould Pump Co., New York, N.Y.
No. 5. *Mechanics of Sewing Machines.* Singer Sewing Machine Co.

We purpose to extend the series as fast as time permits.

SECTION 3

Your committee desires the approval of the association of a plan to offer an exhibit at the Panama-Pacific Exposition under the auspices of the Department of Science Instruction. We are interested in showing how teachers have successfully used real things and models of real things as objects of instruction. Our acquaintance with manufacturers is such as to make us believe that not only all of these concerns who are publishing monographs under our direction, but numbers of others, will co-operate. Manufacturers welcome opportunities to develop a full appreciation of the scientific knowledge associated with their product; even with such simple articles as a hammer, weighing devices, and sewing machines, etc., as much as with more complicated instruments and machinery.

SECTION 4

It is a well-known fact that the laws or the rules of local school boards make it the usual practice to purchase scientific apparatus and school equipment under a system of competitive bids. While this system may be necessary as a matter of public policy, it has had a very harmful effect upon the quality of goods delivered. The price competition leaves wide latitude to the various makers to deviate in details of construction. The result has been to cheapen construction to a point where a large portion of the equipment purchased is unsuited to the purpose for which it was originally intended.

The articles which we use in our physics laboratories should exemplify the best current standards of commercial construction and design. In themselves they should represent the best technical practice and also be rugged enough to wear well with continued use over a period of years. The school boards are now receiving the cheapest things which are capable of bearing the name of "student galvanometer," "pressure pump," "jack screw," etc., far more often than they receive articles which compare in

quality with those purchased by private citizens or by commercial laboratories.

Your committee has not yet been able to agree upon a remedy. The majority favor a plan of affixing a tag to manufactured articles which are guaranteed to be up to a quality standard set by the committee. This tag plan is modeled after the well-known plan of the "Fire Underwriters" who have thereby greatly improved the quality of building materials, equipment, and types of building construction entering into insured structures. The minority, consisting of those members residing in or near Chicago, have voiced their objection in a minority report, which follows:

We, the members of the Committee on the Improvement of Physics Teaching whose names appear below, feel compelled to dissent from certain recommendations made by the chairman of the committee in his report. We approve the plan of collecting and circulating designs and exercises. We approve also the monograph plan as a means of placing valuable information in the hands of the teachers.

We dissent from the recommendation of the chairman that the "tag plan" or some other effective method of establishing a minimum standard of quality for apparatus for the schools under the bid system be placed in operation. Our reasons for dissenting from this recommendation are as follows:

1. We believe that the purpose of the committee should be solely to become an effective national medium for the exchange of ideas and the collecting and distributing of information relating to the improvement of physics teaching.

2. We believe that the purpose of the so-called "tag plan," namely, that of improving the apparatus used in the schools and encouraging the use of apparatus involving commercial applications of the principles of physics, can be accomplished more effectively by means of bulletins of information. The bulletins should be issued by the committee with the aid of the National Education Association and the United States Bureau of Education, and in the columns of such educational journals as may open their pages for this purpose. The bulletins should contain the results of laboratory tests and instructions for experiments with such forms of apparatus as the committee finds educationally efficient, together with such other information as the committee may deem of sufficient importance to justify its publication in this form. Such bulletins should be sent to boards of education as well as to teachers.

3. We believe that the best interests of physics teaching demand, first of all, initiative on the part of the teacher, not excepting the teacher in the small school. Any form of standardization tends to crush the initiative of the teacher. We oppose, therefore, any plan intended to standardize apparatus.

4. We believe that the publication by a manufacturer of a certificate issued by this committee would place the committee in a false light as favoring one manufacturer above another, whereas the committee desires only to improve conditions in physics teaching and welcomes the effort of any manufacturer to adapt his product to the real needs of the schools.

5. In our opinion the proposed "tag plan" is not within the jurisdiction of the National Education Association, since it deals with manufacturers and not with teachers and, therefore, is not an educational proposition. The history of the National Education Association confirms our view that it is, to say the least, unwise for such an organization to make selections of textbooks or apparatus, that is to select the output of certain publishers or manufacturers. In other words, it is unwise for the National Education Association to enter the commercial field.

6. A committee authorized by the National Education Association to carry out the

proposed scheme would be individually and personally liable for the results of their activities on the ground of being agents in producing unfair competition. There is the possibility of the members of the committee becoming involved in serious legal difficulties.

E. E. Burns, Chicago, Ill.
P. B. Woodworth, Chicago, Ill.
W. E. Tower, Chicago, Ill.
G. A. Works, Madison, Wis.

Under the circumstances, it would seem wise to refer this matter of improving the quality of apparatus to a new committee. It must be remembered in this connection that the present conditions are so pernicious that no mere recommendation of a committee campaign of publicity, or individual action on the part of teachers, will appreciably remedy conditions. A very strong positive measure is needed.

In conclusion, the committee wants to thank the hundreds of teachers and the citizens who have given the committee their support, morally and financially. We hope that our year's work without financial aid from this association will merit your still more generous support next year.

DEPARTMENT OF SCHOOL ADMINISTRATION

SECRETARY'S MINUTES

OFFICERS

President—J. H. Francis, superintendent of schools.....Los Angeles, Cal.
Vice-President—C. A. Wait, president, Board of Education.....Decatur, Ill.
Secretary—Frank M. Bruce, publisher, *American School Board Journal*.....Milwaukee, Wis.

FIRST SESSION—Wednesday Forenoon, July 9, 1913

The meeting of this department was called to order in Bishop's Building by M. C. Bettinger, assistant superintendent of schools, Los Angeles, Cal.

"Rural-School Organization and Administration" was the first topic, which was discussed by Mark Keppel, superintendent of county schools, Los Angeles, Cal.

This was followed by a paper on "Rural-School Finances" read by Edward Hyatt, state superintendent of public instruction, Sacramento, Cal.

A general discussion on the rural-school problem concluded the program.

At the close of the meeting the chair appointed the following Committee on Nominations:

P. C. Tonning, deputy state superintendent of public instruction, St. Paul, Minn.
R. F. Asplund, chief clerk, State Department of Education, Santa Fe, N.M.
Edward Hyatt, state superintendent of public instruction, Sacramento, Cal.

Meeting adjourned.

SECOND SESSION—Wednesday Afternoon, July 9, 1913

Joint Session with Department of School Patrons

This meeting was called to order in the Lafayette School by Mrs. William S. Hefferan, National Congress of Mothers, Chicago, Ill., and president of the Department of School Patrons.

The president with the assistance of Mrs. Louis Hertz, Council of Jewish Women, San Francisco, Cal., outlined the aim of the joint session and the work of the Department of School Patrons.

The secretary next read a communication from Francis G. Blair, state superintendent of public instruction, Springfield, Ill., touching upon the "School Revenue and the Rural Schools" announced as his subject upon the program.

L. R. Alderman, superintendent of city schools, Portland, Ore., closed the program with a discussion of "Co-operation of Home and School."

Meeting adjourned.

THIRD SESSION—Friday Forenoon, July 11, 1913

The meeting was called to order by M. C. Bettinger, assistant superintendent of schools, Los Angeles, Cal.

The nominating committee reported as follows:

For *President*—W. R. Hodges, president, Associated Minnesota School Boards, Sleepy Eye, Minn.
For *Vice-President*—José D. Sena, president, Board of Education, Santa Fe, N.M.
For *Secretary*—Frank M. Bruce, publisher, *American School Board Journal*, Milwaukee, Wis.

Moved by J. A. Shawan, superintendent of schools, Columbus, Ohio, to accept the report.

Motion carried.

The program was opened by Frank L. Glynn, director of trade instruction, public schools, New Haven, Conn., who talked on "Trade Schools in the Public-School System."

Meeting adjourned with announcement that the next session of the department will be called for Richmond identical with the Department of Superintendence following a motion adopted at Chicago one year previous.

Meeting adjourned.

FRANK M. BRUCE, *Secretary*

PAPERS AND DISCUSSIONS

RURAL-SCHOOL ORGANIZATION AND ADMINISTRATION

MARK KEPPEL, SUPERINTENDENT OF COUNTY SCHOOLS, LOS ANGELES, CAL.

The rural school is not capable of exact definition; conditions vary so greatly that a fixed classification will have too many exceptions. The definition of a rural school as a school which does not have city school advantages is probably as far as one may go in defining such a school. The most serious handicaps of the rural community are sparseness of population, the excessive distances between homes, and the poverty of the population. Self-help lies at the foundation of all success. Where people are so poor that they can scarcely secure proper shelter, food, and clothing for themselves they are not in a condition to make an effective effort for community progress. Our economic system centers wealth in the cities in geometric ratio. The rural dweller of ambition and initiative moves to the city and as soon as his increasing prosperity will warrant such action calls his relatives and friends to the scene of greater opportunity. The city is ruthless in its competition with the country and in no particular is the hardness greater than in school affairs. The city buys the service of every really great teacher, using its wealth to make rural conditions worse. Should those who plan the organization of a rural-school system imitate the city system or should they attempt the organization of a different system? The school system of a county should be uniform as far as conditions will permit. The ideal system would put all the schools of a county under one management. Such an arrangement would solve many harassing difficulties, but it would run counter to local pride and would call for leaders of high administrative ability.

If the schools of the entire county were under one management, the responsibility of the strong for the weak would be unquestioned and would be a duty and not a charity. Such problems as consolidation of schools and transportation of pupils would yield readily to wise administration. The salary schedule would be uniform according to years of service and up

to a certain number of years of service the most rural school could have the presence of the ablest teacher just as readily as the central city school.

The objections to this system are probably insuperable. Local pride will oppose it everywhere, and leaders of affairs believe that such an administration would be ineffective because of the lack of capable administrators. Therefore we must approximate toward the ideal.

The first need is such a conviction that education is a state concern rather than a local one as will provide adequately for the financial needs of the rural schools. The second need is for a uniformly graduated system of salaries based on years of service, so that for at least five years the most rural school would pay its teacher the same salary as is paid in the most central of city schools. The third need is for adequate rural supervision. The fourth need is for reasonable consolidation of rural schools. The fifth need is for a course of study suited to the needs of each community. The sixth need is for a conception of education as that system of training which will link mind and occupation in harmonious union so that the worker shall find joy in his work.

RURAL-SCHOOL FINANCES

EDWARD HYATT, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, SACRAMENTO, CAL.

Money makes the mare go, in rural schools as well as in other spheres of human activity. Therefore, money is our song.

It is highly desirable to have a part of the funds for the schools come from the pockets of the local people who live in the district. It is well for them to feel an occasional pinch on the pocketbook nerve. It is good for them to know that they have a share in the schools and that they are responsible for them. They value their schools at a higher figure and appreciate them more highly if they must pay for them—pay real money for them. No one is indifferent toward the things that his own hard money is in.

Now it is one of the strongest and most desirable characteristics of our American schools that the people are not indifferent to them, but are keenly interested in them, alive to them, responsible for them.

It would be a bad policy that would remove entirely the burden of their free public schools from the backs of the local people, in order to have it carried more smoothly—more efficiently, if you please—by some central authority apart from the people. This tends to a more efficient system—and a less efficient people. German bureaucracy is not an instrument for producing a free American people. Let me repeat this sentiment—German bureaucracy will not thrive on American soil.

On the other hand, it is highly desirable for some outside authority to give some assistance, to supplement and equalize and standardize the efforts

of the people in the homes. It is necessary to guarantee to every community the money for a standard school. This is something that cannot be left entirely to local poverty, local stinginess, local ignorance, local prejudice. When so committed, it works very ill, for it gives some children short terms, some schools inferior teachers, some peoples bad schoolhouses, some communities indecent conditions.

Wherefore, the state or the county should work with the people of the local school district, those who furnish the children. Local initiative and local interest should be carefully fostered and preserved—and every community should be guaranteed a standard school.

The details of working this problem out in the different states of the Union are as various as the states themselves. I do not venture to enter upon a field so vast at this time. I am familiar with the scheme of only one state, the one in which I live; and it will be sufficient for me to give you a notion of that, without trying to tell of the others about which I do not know.

The basal plan of our school system was shaped less than forty years ago, when the Constitution was adopted in 1879. New communities are fortunate in their schools. They are dwarfs, but they are perched on the shoulders of giants. They are not hampered, restricted, tied down by stingy precedent or by narrow convention. They are brought forth by the young and the aggressive and the enterprising—the timid, the old, the reactionary do not go to a new country—they stay at home to sit on the lid. A new neighborhood, with a brand new school, has a grand opportunity to discard many of the bad customs and restricting conventions that cling to the older communities like an Old Man of the Sea.

We were fortunate in another way:. in having at that time for state school superintendent a young Massachusetts schoolmaster with courage, promptness, activity. His name was John Swett and he still abides with us, a venerable sage whose white hairs are to us the symbol of wisdom. The Constitutional Convention gave him free rein in framing the educational laws of the state. He went ahead, writing into the laws of the land the things that looked good to him and leaving out the things he thought were bad. I shall try to give you the broad outlines of his plan for rural-school finances, after nearly forty years of trial.

1. A permanent state school fund is provided, chiefly by the sale of land, which is invested in school bonds.

2. The interest on this permanent fund, plus the poll tax, plus a portion of the inheritance taxes, plus a certain portion of the general tax on corporations, amounting to $13 per child per year, constitutes the state school fund, apportioned to the counties twice a year by the state superintendent and in turn to the districts by the county superintendent. This yields more than half the running expense of the schools.

3. The county adds to its general tax levy a rate sufficient to make $550 per teacher when added to the state tax; provided, that this county tax

must not be less than a minimum amount of $13 per pupil. This county tax is added to the state tax and apportioned to the districts by the county superintendent of schools. Thus is furnished the other half of the money to run the rural schools.

4. Everything else than the actual running expenses of the standard school must be furnished by the individual district by means of a tax or a bond upon itself, voted by itself. The district must build its own schoolhouse, furnish its own site, improve its own grounds, supply its own equipment. If it wants an extra long term or an extra high-priced teacher or some extra frills of manual training or domestic economy or art or agriculture, it must tax itself further for the purpose. Thus the character of the school really rests with the local people—the architecture, the enterprise, the up-to-dateness, the style reflect the people of the neighborhood.

But the state and the county, strong and free from local strings, insure to every school, no matter how small, how remote, how poverty-stricken, how backwoodsy, a minimum fund of $550, a minimum term of eight months, and a teacher with the same qualifications as those of the city and with a minimum wage of $65 a month for 9 months. This generous provision for the remote and starveling school is unique. A district is organized wherever fifteen children over five and under seventeen years of age are found residing two miles from another school; and it continues so long as an attendance of five is maintained.

These financial provisions of our laws, so easily enumerated, we have grown familiar with as time has gone on until they have become a matter of course, a natural condition that always was so and always will be so. It is only when I compare notes with my fellows from other parts of the nation that I see what great and unusual blessings these are or how grateful we ought to be to the fathers who built the foundation for our schools.

I shall close as I began by saying that the financial responsibility of the rural schools should be so divided between local and general authority as to foster and generate local initiative, responsibility, and interest so far as possible, without allowing any school to fall below a standard level of efficiency.

TRADE SCHOOLS IN THE PUBLIC-SCHOOL SYSTEM

FRANK L. GLYNN, DIRECTOR OF TRADE INSTRUCTION, PUBLIC SCHOOLS, NEW HAVEN, CONN.

Recently there has been a great deal of discussion as to the whys and wherefors of the teaching of manual arts, homemaking, and vocational pursuits of an industrial nature in our public-school systems. For any reality of worth or effectiveness it has mainly ended with mere discussion when considered from the point of view of specific trade training for industrial purposes.

The state of Connecticut stands as a leader in this field, having passed over the discussion stage and dealt immediately with the actual solution. Its beginning was thru the efforts of Mr. Charles D. Hine, the commissioner of education for the state, thru whose investigations the state legislature made a special appropriation for the establishment of experimental schools, his idea being that the best method of working out a system was by actually attempting it rather than merely by analyzing from a purely theoretical point of view. There were two experimental schools established in the state a little over three years ago, one in New Britain, and the other at Bridgeport. Both of these schools have been operating under the same general plan, with the purpose in view of offering specific training in selected trades, covering in so far as possible the equivalent of the old apprenticeship, which has of late years been entirely lost. The course for this instruction covers a period of 4,800 sixty-minute hours of approved training. The time devoted covers an eight- to nine-hour day, five and one-half days a week, fifty-two weeks a year, allowing two weeks of vacation each year for apprentices, foremen, and other teachers, known by the factory term of employees.

The ideals of the school are to maintain a complete factory organization, engaging men who are primarily skilled mechanics, rather than certificated graduates from pedagogical or other training schools. Not that the teacher's training is of no value by any means, but that primarily the preference should always be given to the man who has an accurate and skilled working knowledge of his trade, rather than to one who has a smattering of it with a broad educational appreciation. In order to have a man or woman teach to advantage, he or she must have a working knowledge of the trade to be taught.

The work covers the following departments:

Day school
Continuation school
Half-time school
High-school co-operative
Evening school
Vacation school
Special courses

In the day school, several trades allied with manufacturing, building, contracting, graphic arts, and textile occupations are taught. The relation of the purely academic training to the actual trade instruction is 25 per cent for the former and 75 per cent for the latter, the academic work consisting of mathematics, drafting, science, and general cours es in industrial development, while the trade training consists of the allotted time covering the entire period of the course.

The general plan of organization is that the shop teachers are provided a unit of fifteen to eighteen apprentices, who receive entire instruction from

them personally, rather than that teachers be specialized by departments, causing the apprentices to go from one department to the other in a sort of piece-work production in a factory way. It is necessary for each teacher to relate his academic instruction with the trade processes which he is teaching, and his trade instruction must be provided by a thoroly systematized course of actual commercial production, which has the regular market valuation upon its sale or acceptance by the customer. For instance, in the carpentry trade, boys are taught carpentry, not by exercises, or model work, such as a penholder, a chair, a bookcase, or an ironing board, but rather they go out into the city and build a five- to six-thousand dollar dwelling. This has already been done, and the house built last year in Bridgeport in a restricted section of the city has been sold, and is at present occupied, the boys being engaged in the building of another. From this production the entire scheme of academic training must be evolved, and daily the apprentices may be seen studying their mathematics sitting at a lumber pile, or in the half-finished porch of the building, a steel square or the framing of the house as their textbook, entirely related with the experiences of the day.

This could be enlarged upon greatly, as the other trades are also taught in the same fashion. Apprentices are in machine-shops building machinery for the market, and taking job work from factories, the printers are doing work for people in the city and municipal departments, while the girls are engaged in making hats and dresses for the open market. The proceeds from the sale of these products are turned over to the maintenance of the school and amount to approximately eight to twelve hundred dollars per month, covering the entire expense of maintenance outside of teachers' salaries. It is hoped that in the near future considerable of these earnings may be turned over to the apprentices according to a regular apprenticeship wage scale. The graduates have fulfilled entirely the expectations of manufacturers, superintendents, shop foremen, and associate workmen.

The big difficulty with our school system as at present organized is that the student may leave school at the age of fourteen, and yet he is unable to enter any occupation until sixteen years of age. This trade school permits any boy or girl who is fourteen years of age or over to enter any day in the year from regular employment, or from any grade in the entire school system. One finds the fifth-grade boy rubbing shoulders with the high-school graduate, the one being as good and skillful a producer as the other.

The continuation school is a course of theoretical instruction related to the trade followed, which is offered to apprentices already engaged in factory employment. It is entirely optional on the part of the factory, and attendance is voluntary on the part of the apprentice. The school training is offered one-half day a week to each individual, with different grades of apprentices attending from different factories at different periods. The

training offered is in applied mathematics, drafting, and shop science. The instructor has also to visit the factories at regular periods, so as to be in touch personally with the work in which the apprentice is engaged, so that he may better relate the school training with the individual needs of the apprentices.

The half-time course consists of "week-about" work of the apprentice. One week he is in the factory, the other week in the school as a regular day apprentice. Alternate weeks he is replaced by an alternate apprentice, two boys representing a pair, each one being a "running mate" to the other. This course is open to boys after they have completed 2,400 hours of the regular day trade-school course. There has also been a fully rounded-out apprentice course established in the factory, covering a period of time in each department of production, thru which the half-time boy must go gradually. The main point, however, of this course is that the boy's actual employment in the factory is entirely under the supervision of the school.

The high-school co-operative course consists of an extension of the trade-school facilities during the time when trade-school apprentices are engaged in academic training to regular high-school students in the city department who are taking the high-school industrial courses. This economizes their time, uses the equipment to its fullest efficiency, and puts what otherwise would be merely manual training on the high standards of trade requirements and production.

The evening school, which is open six nights a week, offers training to all persons employed in the trade which they wish to study, for a period not longer than three evenings a week to each individual covering two years. This consists entirely of extension training, and is designed to meet the immediate needs of the applicant, regardless of the "course of study" with which many of our systems are limited and enshrouded.

Vacation school is open during July and August for any student in the general public-school system who wishes to attend for any period of time convenient.

In addition to these regular courses and departments, special work is given for all who wish to enter for any special purpose. For instance, a man may enter at any time for a two months' or a three months' course in machine-shop, carpentry, printing, or whatever he may wish, while the women may take a special course in dressmaking. Special extension work is also offered in stationary steam engineering, which consists of evening instruction, only, in the school, while the engineer in charge is given ample time for supervision of those attending in their factory employment.

The success of this institution may best be shown by the fact that this entire plan and organization has only recently been adopted by the city of New Haven, which is to pass over the experimental stage, and build upon the cumulative experience of the Bridgeport experiment. It repre-

sents the most unique plan which up to the present has been developed in America. It is not, however, to be misunderstood as a place for consigning people, or for committing those students who are undesirable for the general elementary schools. The aim is to create a school, as in Bridgeport, where boys and girls will really want to be, with plenty of opportunity for physical, mental, and creative activity, all pointing toward increased earning efficiency and advancement over apprenticeship.

The first year of the girls' training will be intensified along the lines of homemaking. The second year will be devoted to the special trade, whether it be cooking, plain sewing, dressmaking, costume design, ladies' tailoring, embroidering, lace-making, candy-making, jewelry, or such other trades as are adapted to girls; or for boys, machine-shop, woodworking, printing, plumbing, painting and decorating, paper-hanging, sheet metal work, etc. It will also have a continuation department for all trades in the city covering 145 different industries, not to mention the smaller handworkers' occupations. Extension work will also be offered for girls engaged in office, commercial, or factory employment, pointing toward increased efficiency in homemaking, while special courses will be offered on a unit basis for persons already engaged as homemakers and housewives, where they can learn to make children's clothing, plain sewing, pastry cooking, canning, preserving, or such other specialized lines for which a demand may arise.

The whole purpose of the movement in New Haven, which has already received the indorsement of labor leaders, unions, manufacturers, master-employers, business men, and educational leaders, is to establish a large central institution of industry in which anybody at any time may receive instruction in any occupation he may desire.

LIBRARY DEPARTMENT

SECRETARY'S MINUTES

OFFICERS

President—MARY E. HALL, librarian, Girls High School ..... Brooklyn, N.Y.
Vice-President—JAMES V. STURGES, principal, State Normal School ..... Geneseo, N.Y.
Secretary—EFFIE L. POWER, supervisor of children's work, Public Library..... St. Louis, Mo.

FIRST SESSION—MONDAY FORENOON, JULY 7, 1913

The meeting of the Library Department was called to order in Unity Hall, Salt Lake City, by the president.

In the absence of the secretary, Elizabeth C. Smith, librarian, Utah Agricultural College, Logan, Utah, was appointed secretary *pro tempore*.

After a few words of welcome Howard R. Driggs, library secretary, state board of education, Salt Lake City, Utah, spoke on the topic, "Connecting the Public Schools with the Public Library."

James F. Hosic, head of the English department, Chicago Normal College, Chicago, Ill., then read a paper on "The Conduct of a Course in Literature for Children."

"The Library Hour in the School" was the subject of a paper read by Harriet A. Wood, school librarian, Library Association, Portland, Ore. This paper was discussed by Joanna H. Sprague, public library, Salt Lake City, Utah.

Miss Wood then conducted a "book symposium" on "Notable Recent Books for Children." The books on exhibition were discussed by the following persons: Frances Jenkins, supervisor of elementary grades, public schools, Decatur, Ill.; Jessie Goddard, head of the English department, Lincoln High School, Portland, Ore.; Howard R. Driggs, library secretary, state board of education, Salt Lake City, Utah; and Lucile F. Fargo, North Central High School, Spokane, Wash.

Two committees were appointed by the president as follows:

COMMITTEE ON NOMINATIONS

Howard R. Driggs, library secretary, state board of education, Salt Lake City, Utah.
Esther Nelson, University of Utah, Salt Lake City, Utah.
Joanna H. Sprague, public library, Salt Lake City, Utah.

COMMITTEE ON RESOLUTIONS

Harriet A. Wood, public library, Portland, Ore.
Lucile F. Fargo, North Central High School, Spokane, Wash.

The meeting then adjourned.

SECOND SESSION—WEDNESDAY AFTERNOON, JULY 9, 1913

The department met in joint session with the Department of Rural and Agricultural Education. The meeting was called to order in the First Presbyterian Church by E. C. Bishop, Iowa State College, Ames, Iowa.

O. S. Rice, state library clerk for Wisconsin, Madison, Wis., read a paper on "Rural-School Libraries: Their Needs and Possibilities."

A paper on "The Influence of the Agricultural College on the Farmer's Use of Books" was presented by William M. Hepburn, Purdue University, Lafayette, Ind. This paper was read by Anna Price, of Lincoln, Nebr.

"Libraries for Rural Communities" was the subject of an address by Philander P. Claxton, United States commissioner of education, Washington, D.C. This topic was

discussed by E. M. Phillips, state commissioner of rural schools, St. Paul, Minn., Arthur C. Monahan, Bureau of Education, Washington, D.C., and others.

Meeting adjourned.

ELIZABETH C. SMITH, *Secretary pro tempore*

THIRD SESSION—FRIDAY FORENOON, JULY 11, 1913

ROUND-TABLE CONFERENCE

The meeting was called to order in Unity Hall by the president. Esther Nelson, librarian of the University of Utah, Salt Lake City, was appointed secretary *pro tempore*.

Ida M. Mendenhall, library school, New York Public Library, New York, N.Y., chairman of the Committee on Normal-School Libraries, presented the report of that committee. This report was discussed by W. J. Hawkins, president of the Normal School, Warrensburg, Mo.

Mr. Hawkins offered a resolution that the report be accepted and that copies of it be printed by the National Education Association and distributed to all normal schools. The resolution was unanimously adopted.

Lucile F. Fargo, librarian, North Central High School, Spokane, Wash., read a paper on "Training High-School Students in the Use of the Library." A general discussion followed this paper.

The nominating committee reported as follows:

For *President*—Willis H. Kerr, librarian, State Normal School, Emporia, Kans.

For *Vice-President*—Philander P. Claxton, United States commissioner of education, Washington, D.C.

For *Secretary*—Harriet A. Wood, public library, Portland, Ore.

The report was unanimously accepted and the officers declared elected.

The Committee on Resolutions presented the following report, which was adopted and placed on file:

Resolved, That the thanks of the Library Section are hereby tendered to Esther Nelson and the other members of the local committee for their many courtesies and cordial entertainment of the members of the Library Department.

Resolved, That we express our appreciation of the exhibit materials so generously lent or given by the League of Library Commissions, public libraries, high-school and normal-school libraries, and so carefully arranged and explained by Joanna H. Sprague, chairman of the local exhibit committee.

Resolved, That we extend our thanks to the presidents of the Normal and Rural and Agricultural Departments for co-operating so heartily in joint sessions and for the admission of library topics on their programs.

Resolved, That this department deplores the present frequent appearance of slovenly written and carelessly edited children's books, and recommends to authors, editors, and publishers more careful consideration of the following points:

a) Such simplicity of diction as will put the books within easy grasp of the children for whom they are written.

b) Accuracy and simplicity of sentence structure.

c) In general, the use of such beautiful, accurate, and appropriate language as will aid, rather than hinder, the boys and girls of this country in the formation of a correct literary taste.

Your committee also makes the following recommendations:

1. That a committee on rural-school libraries be appointed by the incoming president.

2. That the Library Department hold a session at the midwinter meeting of the Department of Superintendence, or be represented on the program of the Department of Superintendence by a speaker.

3. That the Committee on Resolutions of the National Education Association be requested to include definitely in their resolutions the idea of the library as an educational instrumentality.

The meeting then adjourned.

ESTHER NELSON, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

CONNECTING THE PUBLIC SCHOOLS WITH THE PUBLIC LIBRARY

HOWARD R. DRIGGS, LIBRARY SECRETARY, STATE BOARD OF EDUCATION, SALT LAKE CITY, UTAH

A public library is bounded by its reading circle. Its influence is to be measured by the number and character of those who use it. The chief business of the library is to widen that reading circle, to cultivate among its patrons the right book habits.

The surest way for any library to broaden its influence, the quickest way for it to develop in the community the proper reading-habits, is to blend its work closely with the schools. The great problem before the library workers now is: How can we best establish the connection between the two institutions?

The first thing necessary is to make the school people face the problem squarely. They have never yet done so. Teachers must be brought to realize that their duty is not half done when they have merely taught the child how to read. It is their business to train in him a discriminating love of good books. No teacher should be permitted to teach till she has taken a course that gives her such an acquaintance with children's books as will enable her to direct wisely the reading-habits of her pupils.

The library must become an integral part of the public-school system. The movement to make our schools social centers, to equip them with reading-rooms, gymnasiums, and other means of recreational and social uplift, is rapidly sweeping over the country. We must adjust our work to meet the demands of progress. I dream of a time when every school will either maintain a public library or contain a branch of one, when every school board will purchase regularly all the supplemental reading-books needed by boys and girls, when every teacher will be an assistant librarian and every librarian a teacher-librarian, when every elementary school, high school, and college will give courses that train boys and girls to use a library intelligently, when every community will have efficient book leaders to direct the reading-habits of both parents and children.

In Utah the law places the public library and the public schools under one head. The library is thereby recognized legally as an integral part of the public-school system. The Utah library laws provide:

1. That the state board of education shall also be the library commission of the state, and shall have power to appoint a library secretary, library organizers, and such other assistants as may be needed to carry forward the work.

2. That any state or town may establish a library and levy a tax to maintain it.

3. That every school district, except those of cities of the first and second class, must spend fifteen cents per capita for children within school age for the purchase of library books chosen under the direction of the state board of education.

4. That any school board may open the school library to the public under such regulations as the board may prescribe.

5. That the school district and the city may co-operate in maintaining a public library and bear the expense between them.

As an effect of the example thus set by the state, most of our communities are working out the problem of close correlation between the public library and the public schools in the same way. The board of trustees usually includes the school officers.

An even closer connection of the library and the schools has been effected in some communities which have adopted the plan of the co-operative library. The school board in such places pays part of the expenses, or provides a room, or regularly expends its library fund for books, and supplies the library with them. This provision for the co-operative library has made possible a public library in even the smallest of our incorporated towns.

The closest correlation between the library and the school, however, is to be found in the school public library. This type of library, as its name indicates, is simply a school library opened under certain regulations to the public. Several distinctive advantages have come from this plan. It extends the influence of the school thru providing for directed reading during the vacation period, it connects the home more closely with the school by distributing books among the patrons, it takes the place of the traveling library, which, because of the peculiar geography of our state, was always difficult to distribute, and it enables every hamlet to have the advantages of the library. Many very effective school libraries are now in operation. An effort is now being made to train teacher-librarians to take charge of them. The hope and promise is that within a very few years every city, town, and hamlet in our state will be provided with a library of one of these three types, the municipal library, the co-operative library, or the school public library. But whatever the type, the library will be developed in close connection with the public schools. This we feel is absolutely essential to its fullest success.

THE CONDUCT OF A COURSE IN LITERATURE FOR CHILDREN

JAMES FLEMING HOSIC, HEAD OF THE ENGLISH DEPARTMENT,
CHICAGO NORMAL COLLEGE, CHICAGO, ILL.

For a number of years it has been my privilege to give to teachers in training, teachers in service, and parents in their clubs a course in the choice, adaptation, and presenting of children's literature. In fact, I may fairly claim to be one of the pioneers in this field, particularly as regards emphasis upon the sources from which reading for the immature should be drawn. What I have to say, therefore, will be based directly upon experience, and, while not new, may at least serve to enforce certain principles which can hardly be given too great weight and importance.

In common with others who have come to be identified with this subject, I have been repeatedly urged to make out lists of books which may be confidently offered to children, in the belief that they will both please and benefit them. There appears to be no other responsibility involved in the care and training of the young which seems more difficult of discharge than that of selecting books for them. Parents are especially eager, often pathetically so, to be told precisely what to do and how to do it. Would I recommend such a book? What would I do if a child behaved thus and so? Like others, too, I have made out certain lists, particularly lists for use in the schools, and I have faith that the selection and grading were mainly good, but after all what is needed is not lists but principles—principles of literature, principles of child growth, and principles of teaching. What I have to say may very well be summed up under those heads, for a course in children's literature which deals faithfully with each of these cannot fall far short of its object.

First, then, we may inquire what is meant in this connection by principles of literature—not, let me hasten to say, the history of English literature. That has been somewhat persistently taught in high school and college now for a good many years, but, while it is informing and even indispensable to the seeker after knowledge and culture, it is comparatively valueless to those who are to deal with children. Comparatively, I say, because something else is so much more important. What that something is may be roughly indicated by reference to those general studies in the sciences which we are in the habit of calling the elements of the subject or an introduction to it. Such studies are intended to reveal the genesis of the subject and its chief outlines and methods. Similarly students may approach the art of literature, define its peculiar purposes, set up its boundaries, and learn how it serves as an expression of the human spirit.

That most persons, even the favored, have never done this, I can confidently assert. They have read many books, perhaps, but they have not identified their methods, have not learned to interpret them or to evaluate them. Hence they often find little pleasure in literary masterpieces and have but a meager insight into the meaning and beauty of great books. Much less have they distinguished the types and species into which literature differentiates in the course of a nation's history or discovered the wonderful uniformity with which the savage dance becomes the mature drama, and the rude rhythmic cries of the same early period the exquisite tone pictures of a modern lyrist. In short, ignorance of the real nature of literature and of the fascinating story of its evolution from savage thru barbaric and autocratic to modern states may fairly be assumed by him who plans to give a course in literature for children.

To me knowledge of these matters seems fundamental. No one can teach what he does not understand, and the *understanding* of literature involves acquaintance with such basic principles as those at which we have

just glanced. How shall students be most readily and thoroly orientated in these matters? My answer is, by discovering and formulating for themselves the main principles of literary art and by examining for themselves specimens illustrative of literary evolution. Fortunately this can be done without loss, inasmuch as the pieces to be passed in review may be largely those of importance in the other phases of the work.

A good beginning may be made by placing in the hands of the group a collection of poetry made up of the good, the bad, and the indifferent; some of it adapted to children, the remainder unsuited or doubtful. Let the student face the questions: Is the piece before me good poetry? Why do I think so? What interest or experience seems to have inspired the work? What effect is it fitted to produce? Have I read anything like this before? How did it differ from this? Was it better or worse? Why? Those of my hearers who have never tried this experiment with a class of university graduates who have taken only the required courses in English have a striking experience awaiting them. The perfect helplessness of many such when obliged to decide for themselves as to the spirit and purpose of a literary selection and its merits as a composition are a speaking commentary upon a civilization and a system of education in which art is ignored because it doesn't pay. We moderns worship the brute *fact* and have no eyes for the more elusive *truth* which it is the business of literature to express. As the work proceeds, confidence grows, criteria emerge, impressions are identified and referred to their sources, and, by and by, the class will succeed more or less adequately in making an intelligent and just interpretation of the spirit and purpose of each selection, and will show gratifying progress in the power to separate the wheat from the chaff.

Let no one suppose that I think it possible to arrange a machine by which poems may be sorted, as apples are, into A1, middling, etc., by simply passing them along until they come to the right aperture and drop thru. Reading poetry, thank heaven, is still an individual affair. Yet there are matters of taste which are fairly beyond dispute. At all events, it is better to have some objective standards of judgment, and skill in applying them, than not to be able to judge at all.

After the volume of poetry may come examples of various literary types—a collection of ballads, a translation of Homer, some early plays, Shakespeare, a novel, a few essays—until the class have organized and made available all the knowledge which they possess of the structure and appeal of these different methods of artistic expression, and of the meaning and use of the numerous devices such as imagery, tone quality, suggestion, suspense, contrast, etc., which writers employ in securing the desired effect. Generalizations should be made cautiously and modestly, and the substitution of hearsay evidence gathered by prowling about among library references on criticism should be regarded as unfair play and a cowardly dodging of the issue.

Our second body of principles relates to children. With the flood of books and articles on child-study which we have witnessed in the last two decades in mind, we might be justified in assuming that the members of our class are well informed on this head. This has not, however, been my experience. In the case of parents and older teachers there is frequently to be found a good deal of shrewd observation, but rarely has this resulted in any rational policy. The child-study specialists have done something in the way of recording and generalizing concerning literary tastes and capacities, but unfortunately the scientific training necessary to becoming a psychological specialist generally unfits a man for dealing with questions of taste, even if he had predilections toward art to begin with. It is much easier to find out when a child's lower extremities usually elongate most rapidly than when he is likely to take to hero tales or poems of nature. Indeed, the half-knowledge which has been put forth and accepted as science in education presents a problem of clearing away misconceptions which is nearly the first which we must attack in this connection. I may cite, for example, the work called *Organic Education*, which was written with large faith in recapitulation literally interpreted and which provided a stage of civilization, sometimes two, for each school year. In this way modern civilization was reached and compassed in the eighth grade. The high school, I suppose, was intended to be a sort of anticipation of the heavenly future.

There are certain things which a class interested in children and literature can do. First, they can recall and interpret their own experience with books. I know how difficult this is, but since judgments will be based upon experience whether or no, it seems best to make the most and best of it. Second, the members of the class may be set to experimenting and observing. Let various stories and poems be tried on the younger ones at home and in the neighborhood. If the selections are made with the approval of the teacher and handled according to his suggestions, each pupil will have first-hand contact with the subject in a most vital way. Thirdly, the class may survey by reading, discussion, report, and lecture the not very extensive literature bearing upon the human instincts to expression, the social instincts, the sense of beauty in the young, etc. If this is constantly illustrated from the material gathered by introspection and observation and if the whole body of ideas is carefully worked over and arranged with proper perspective, the result will be real orientation.

It is particularly important that at this point the studies in literature and the studies in children be brought together. The first set of studies called to mind many typical facts concerning folk life and folk thought. These may now be enlarged upon, particularly with regard to the literary characteristics of the folk tale, the myth, and the legend. The striking likenesses and differences between folk ways and child ways will stand out plainly, and a clear conception of these is invaluable in determining the

choice of literary material for younger ones. The "Mother Goose Rhymes," "Cinderella," "The Three Pigs," "Little Red Riding Hood," "Pandora," "The Golden Fleece," "Robin Hood," and many more should be passed in review. What are the literary characteristics of these? What elements of permanence do they possess? Why are they popular? What interests of childhood do they minister to? What values do they contain?

Here the question of version will arise. No doubt the class have learned (they ought to handle the volume) about Miss Cox's remarkable collection of 345 variants of the Cinderella motif. They may profitably compare a number of versions of several other old tales. "The Three Bears," for instance, "Johnny Cake," "Little Red Riding Hood," "Sleeping Beauty," and that masterpiece of English dialect, "Tom Tit Tot." The pupils will discover how completely the old tales may be garbled, how they may grow by accretion of familiar formulae and stock incidents, and how completely some moralist or pedagog may transform an artless human tale into a stupid high-flown sermon or a staccato reading-lesson. The value of this part of the work will be greatly enhanced by having the class as a whole compare three or four standard collections, such as those of Jacobs, Dasent, Perrault, and the Grimms, and afterward make reports individually on volumes of tales from various nations, Japan, Italy, Russia, Africa, etc. The expense of equipping the library for such work is not very great and the results amply justify it. Of course the myths and legends should receive their share of the same treatment. The net result will be not only a notion of what the problem of choice of literature for children involves, but also a very considerable addition to general knowledge, culture, and acquaintance with methods of study.

With such a foundation the class will approach lists and courses with critical intelligence and should now be instructed with regard to current practice in this field. Each should compile a general bibliography, including books and articles, and also a more exhaustive bibliography of some one phase of the work. Such treatment of the King Arthur stories would involve the proper entering of the sources of the stories, the most important historical and critical references, the versions which are adapted to children, and the most useful accounts of the value and presentation of the stories to children. Each entry should be in due library form and should be briefly annotated.

With such a body of concrete material freshly in mind, the class may be trusted to consider the presentation of literature with some degree of independent judgment. Naturally, in the course of the preceding lessons, much has been said incidentally about story-telling, reciting poems, etc., and the discussion of literary selections has required quotation, reading aloud, rehearsing of incidents, outlining, summarizing, and kindred activities. The whole problem may now be viewed vertically and horizontally, that is, children of different ages require different treatment, while pieces

of different sorts will best be assimilated if handled each according to its peculiar nature and method. *Alice in Wonderland*, for example, will be read lightly, the teacher or older friend reading the subtler parts and making those suggestive comments which may help the duller to kindle and catch the humor without spoiling it for any by stupid questions or explanations which cannot explain. *Robinson Crusoe*, on the other hand, will stand a lot of mauling. Robinson presents a puzzle problem in overcoming the elementary difficulties of human existence. Children like to hear about him before they can read Defoe's book, and they enjoy dwelling on his exploits, guessing what he did next or how he provided for some new necessity. They like to see pictures of his stockade, of his house, of his meeting with Friday, etc. The tale-teller may well dwell a little on this story, illustrate with crayon or pencil, and build up bit by bit the picture of Crusoe's life. Perhaps the famous ride from Ghent to Aix has been chosen. The form is narrative poetry—a galloping meter, a kaleidoscopic succession of scenes, a hundred devices to make the reader breathlessly eager for Roland to arrive with the "news." Obviously no child will be likely to get the full effect until he has heard the poem well read. This his older friend must do. Then, with comments opening the way, he should be skilfully led to notice the telling suggestions by means of which Browning gradually communicates to the reader his own feeling of suspense and triumphant admiration. Indeed, it will be found of profit to lead the children to discover some of the ways in which the poet has played upon our feelings; by describing the hot sun, the falling-away of two of the three horses, and the amazing gift of the "last measure of wine" by the phlegmatic burgesses. Or, to take one more illustration, our selection may be a play, or at least a story full of action and dialog. Here it will be well to make sure that all are clear as to what happened and why. Who wanted to do something? How was he opposed? Did he succeed or fail? Why? This will require that the pupils read rapidly thru the piece, noting as they go the chief incidents and the chief traits of the characters. Then we may sum up a little. What are the good qualities of our hero? What are the bad? How did he look and act? This suggests the dramatizing or dramatic reading of selected scenes. Slight suggestion to the imagination will suffice for the stage. Emphasis and intonation must do the rest.

If the class can see such work done, or better, actually do it themselves under the direction of those with skill born of experience, they will add immensely to the value of their course. There is not much to be said, I fear, for the device of having the members practice on each other. They should, however, be required to master completely a number of pieces of various kinds suitable for various ages, and they should be given as much opportunity to recite, read aloud, tell stories, and arrange versions and dramatizations as the time at disposal will allow.

Obviously, to cover the ground which I have marked out will require

several months—in the case of classes not aided by parallel courses, at least a year. The time will be well spent. Few courses offer a richer content or wider range of interests. Of training in non-literary material for children's reading I have not spoken, nor of the handling of periodicals. Those topics properly belong in a general consideration of children's reading and the guidance of it, but they do not fall within the scope of this paper.

THE LIBRARY HOUR IN THE SCHOOL

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People know how to read and they are reading. What they read is largely accidental. It is natural to follow the easiest course. The newsstand and the street furnish most of the mental pabulum upon which they feed. Parents, careful about their children's physical food, are careless about their mental food; but "no degree of proficiency at inserting calories in correct numbers into Little Sally's stomach can atone for lack of skill in leading Little Sally herself thru the *Child's Garden of Verses* with trowel in hand to dig up the gayest plants and reset them in the memory." The never-ending series, the unspeakable joke-book, and the Sunday supplement continue to flourish. The magazines most widely read are not found in public libraries. That reading in itself is a virtuous and an uplifting process is a fallacy. Learning to read provides children with a powerful tool that may prove their undoing.

Adults control the contacts of little children, who are open-minded and eager to play the game of knowledge. It is their right to learn to know the good from the evil, the worth-while from the commonplace. Alert teachers and parents have long been aware of the importance of creating an appetite for good books. They are developing the intelligent readers who support free libraries. A taste for the best things in art, in music, and in literature is the result of cultivation. Outlook is needed more than technic. The ground must be prepared and the weeds kept out. Dr. Berle in his illuminating little book, *The School in the Home*, reiterates this thought:

> There must be a mind fertilization which is at the same time a sterilization against other things. There must be the arousing of interests which by their fire and picturesqueness and enjoyment will make the rest seem tame and listless. There must be such a linkage of real knowledge, and the process of gaining it, with delight and pleasure, as will make the senseless and idiotic things offered to rational beings for amusement seem an insult to the mind. There must be such a co-operation between the home and the school as will secure the continuous education of parents in the education of their children, that will make for the enrichment of the mental life of the household.

The librarian as the keeper of the books desires to make his wares available to parent and teacher at every step. Those who come in contact with the children at home and at school know their needs and possi-

bilities far better than any librarian. The librarian must for the most part remain in the background, responding to requests for the right book at the right time. The library and the school must be so closely knit together that the world's experience recorded in books sheds light upon every hour of the school day. The librarian must be familiar with the books that strengthen and enliven the course of study and solve the problems of the school. The teacher must be familiar with the resources of the library, especially the library to which the pupils have access. Hand in hand the librarian and teacher must lead the pupils from the intelligent use of the classroom library to the larger opportunities of the public library and to the selection of their own private libraries. When and by what methods this is to be done are the questions before us.

There is a woeful lack of self-organization in the adult today. "If you wish it in the life you must put it in the school" runs an old German adage. The organized playground, the vacation schools with their gardens and manual training herald the new day. They provide an outlet for the activities of the body and of the mind. The library is the servant of them all. After the children have worked off their surplus physical energies, they gather around the "library teacher," who tells a story or reads a poem that makes them eager to read others from the books in the traveling library. Properly directed to the books of games and outdoor pastimes, they learn the joy of entertaining themselves and others. The book that the teacher says is good is always popular.

The teachers in the manual-training centers have a wonderful chance to open up books to the earnest little workers at the benches. Each center has its traveling library of live books not only dealing with the shop but leading out into the world. Think of the impetus that the lives of William Morris and Ruskin and Edison will bring to the ambitious boy craftsman! Requests for interesting points about books and libraries come from the manual-training teacher who is preparing the background for the lesson on the bookcase. He is glad to learn that the library has a valuable collection of incunabula and rare books, some still bearing the marks of the mediæval chains, and plans to bring his pupils to see them.

It is fitting that the special teachers of art, music, and sewing should introduce pupils to the literature of their subjects. Statements about books should be provided for teachers by supervisors, so that every subject may have its library hour. A vast field yet remains for the grade teacher. The course of study furnishes the necessary background for books that are worth attention. The electric current is of value only when the circuit is complete. The teacher must be saturated with the literature of her subject and watch for the psychological moment.

Reading aloud seems to be the most popular form of library hour judging from the demand for suitable books. A few general principles should govern the choice of material.

What to choose:

Books that have stood the test of time.
Books that are strong enough to make an impression.
Books that are too difficult for the child to read silently.
Books that need the voice to bring out the beauty of the language.
Books that provoke discussion.
Books that uphold virtue, honesty, self-sacrifice, benevolence, courage, kindness without self-consciousness, industry.
A complete short story from a collection, or a striking incident from a longer story so that the child may desire to read more.
A poem that tells a story.
A poem that sings a song.
A poem that paints a picture.

What to avoid:

Commonplace books.
Books that can be read easily by the children.
Books filled with slang, illiterate expressions, and dialect.

The children's time is too precious to waste on trash. The fine things in our literature and national life are crying out for a chance to be heard. Kenneth Grahame's *Wind in the Willows* is highly enjoyed by young boys of nine or ten who get little out of it alone. Kipling's *Just So Stories* and the *Jungle Books;* Lucretia Hale's *Peterkin Papers*, Andrews' *Perfect Tribute*, Edward Everett Hale's *Man Without a Country*, Seaman's *Jacqueline of the Carrier Pigeons*, and Stein's *Gabriel and the Hour Book* gain effectiveness from reading aloud.

The hour when the hands are busy may be a period for broadening the outlook of our girls, so that their conversation and their lives may be worth while. We are fortunate in having a teacher of millinery in our trade school who sees the value of the sewing-hour as an opportunity to open up the beauties of her native France and to create a desire to visit that wonderful country. The girls are thrilled by the tragic life of the unfortunate Marie Antoinette. They are fascinated by the sound of the French language and are ambitious to go to Paris as buyers. When they do they will not be absorbed by the shops.

Miss Reynolds, of Cheney, Wash., writes of a geography library hour on adventure and exploration in cold waters. Boys in the sixth grade reviewed Peary's *Snow Baby*, Nansen's *Biography*, *Finland from Peeps at Many Lands*, and Dr. Grenfell's *Adrift on an Ice-Pan.* Such books and hero tales, especially of northern lands, inspire vigorous manhood. Material for vocational guidance is found in biographies. An acquaintance with Ellen H. Richards, Alice Freeman Palmer, and Helen Keller would rouse the most thoughtless.

The history of a word may be a story. Dr. Berle's children enjoyed that chapter in Kingsley's *Water-Babies* dealing with the professor's ailments, with Bumpsterhausen's blue follicles and the doctor's diagnosis

of his case with its long words, medical and surgical. The dissection of polysyllabic words is a fascinating game in verbal analysis that strengthens the vocabulary.

The delight of classes brought to the library to see the marvelous Audubon bird pictures emphasizes the possibilities of the finely illustrated book. The Curtis Indian pictures capture the imagination of all the boys and many of the girls. The history of the book illustrated at each step by facsimiles and pictures concentrates attention upon the library showcase for days afterward.

Believing that books are tools in the hands of the teacher for the intellectual and social uplift of the home, the public library of Portland supplies every schoolroom with classroom and traveling libraries. All books may be issued for the home reading of pupils, parents, and teachers. They furnish wholesome pleasure and prepare the mind for higher studies. Children will never again have as much free time. If properly directed, right tastes will be formed. The school lessons inspire pupils to enlarge their knowledge. They must be shown the best books and taught to use the tables of contents, indexes, and library catalogs. Simple lessons, two for each grade, on the care and use of books are a part of the course of study issued by the public schools. Librarians give these lessons in the school and in the library, the teacher supplementing them.

The plan includes the essentials in the care, use, and enjoyment of books. Many of the points have been adapted from the more elaborate course prepared by Mrs. Englander of Cincinnati. Cleanliness is the first principle emphasized. Fresh, clean books come back bearing ample evidence of the insanitary conditions in the home and the lack of respect for public property. We need more "Clean Peters" to wash the children of Grubbylea. The Goops are very prominent members of juvenile society. The children are taught that returning books on time is only fair play and that paying for lost books is a practical application of the principles of the Village Blacksmith, who

> Looks the whole world in the face
> For he owes not any man.

They become so interested in the authorship of their books that they stop the librarian in the street to display their new knowledge. One boy wept copiously because he didn't know where the public library was. The catalog and classification are taught by games and exercises in the school and the library. The make-up and the history of the book and the collecting of private libraries are brought out. The Senior class in the grammar school spends an hour in the reference room of the central library so that every pupil may feel at home there. The use of dictionary, atlas, and encyclopedia is thoroly explained.

How to judge a book may be learned early, therefore, in the second lesson, talks are given on the individual books in the classroom libraries,

emphasis being placed on nursery rhymes, poetry, humor, heroes and biography, travel, music and art, history, and standard fiction in successive grades.

Whether it is best to have a regular time for the library hour is a question to be determined by local conditions. New York City sets aside the last hour on Friday afternoon of each week. When the librarian gives the work, it is often necessary to go from room to room thruout the day. It is certain, however, that in planning the curriculum reasonable time should be allowed for the literature of each subject and the means of getting at it.

As no subject is complete without its bibliography, a few references are added to articles, books, and lists that furnish material and suggestions for endless library hours.

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RURAL-SCHOOL LIBRARIES: THEIR NEEDS AND POSSIBILITIES

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STATUS OF RURAL-SCHOOL LIBRARIES

In answer to a questionnaire on school libraries recently sent to state superintendents, only eighteen of the thirty-four replies received give the total number of books in school libraries, and only about half of these give the number of books in one-room school libraries, or figures from which estimates could be made.

From the replies received, it can safely be concluded that, for the country at large, the average number of volumes in the libraries of one-room schools is considerably less than fifty; and furthermore that a large percentage of such schools do not have any library books whatever. Even in view of the remarkable recent development of school libraries it becomes evident that one of the most pressing needs is such legislation as will make

sure of rapid increase in the number of rural-school libraries and in the number of volumes in the libraries already established.

Thirty-nine of the states have enacted laws relating to school libraries. Of these states twenty-two grant state or county aid for their establishment and maintenance. With the exception of eight states, however, aid is dependent upon the raising of money for the library by the friends and patrons of the school or by local taxation. It would seem that this condition is likely to prevent the establishment and growth of school libraries in many of the very communities which most need them. It is likely that the best results would be attained if every rural-school district were each year to receive unconditional aid for library purposes and then receive additional aid in case local funds were also raised. So far as I am aware, no state at the present time has such a provision in its laws relating to school libraries.

TRAVELING LIBRARIES

The supplementing of rural-school libraries by means of traveling libraries sent out by the state, the county, or by local public libraries can be made an effective agency in rapidly improving present conditions. Oregon reports: "Numerous school districts thruout the state are [state] traveling library stations." In New York "demands [by rural schools] for loans [of state traveling libraries] are increasing from scores to hundreds a year."

The county libraries being established in California promise good results in this direction. In the school code of Washington state we find the provision that "the county superintendent of each county may establish a circulating library for the use and benefit of the pupils of the common schools of each county." Information regarding the practical working of this law was not at hand when this paper was prepared. It seems reasonable, however, that the county superintendent's office can, if sufficient and efficient help is provided, be made an effective rural-school library center. The selection of books for these libraries, the repair of books, and the sending-out of traveling libraries are among the activities that might well be centered in that office.

With the exception of isolated instances, principally in the eastern part of the country, local public libraries as yet seem to provide but little help in the way of supplementing rural-school libraries. A good example of the possibilities of this relatively neglected library field is furnished by the rural-school extension work of the public library which has been carried on at Dover, Me., for the past ten years in co-operation with the district superintendent of schools. The public library sends sets of books to from twelve to fifteen rural schools. Superintendent Sturtevant reports:

> Last year 1,500 of our best books were issued to homes in these rural districts from these school libraries. In addition, there were books upon biography, history, travel, and nature work, which were not charged on the regular slips, in almost constant use in many of these schools.

EXCHANGE OF LIBRARY BOOKS

Exchange of library books seems a reasonable arrangement for increasing the number of books available in rural schools. This year's legislature in Wisconsin enacted a law providing for such exchanges. The county superintendent, with the consent of the district boards, may arrange exchanges, tho the exchanges may be made without his intervention.

SELECTION OF BOOKS. STATE LISTS

Every precaution should be taken that school libraries shall consist of well-selected books. The achievement of this result will be greatly facilitated if a list of books is issued by the state from which list books must be selected in order to entitle school districts to special library aid. It is gratifying to be able to say that already twenty-six of the states issue lists of books for school libraries, some annually, some biennially, and others at longer intervals.

Another advantage of a state list is that substantial discounts from list prices can thus be made certain, and this means, in the aggregate, a much larger number of books in school libraries. Nineteen of the twenty-six states which issue such lists have made definite arrangements for reduced prices on school library books. In Wisconsin the average discount to school districts on books on the state list is 31.7 per cent.

USE OF SCHOOL LIBRARY. THE TEACHER'S PREPARATION

What books are in the hands of the pupils and for what purpose are as important questions as what books are in the school library. Here the main reliance must be placed on the teacher, his education and training in the use of the library himself, and in securing such use of the books on the part of the pupils. *The teacher untrained in the use of books and other reading-matter is the weakest link in the school library chain.* In the answer to a questionnaire recently sent to state and county superintendents the training of teachers to secure effective use of rural-school libraries was mentioned more often than any other need. Normal schools are beginning to respond to this demand by including some library training among required subjects in their courses of study. However, the subject will not be given its proper place until it ranks at least as high, for instance, as algebra, in regard to time and compulsory requirements. Candidates for teachers' certificates should be examined in library methods and knowledge of children's reading. All candidates for county teachers' certificates in Wisconsin must, after January 1, 1915, pass such an examination, according to a law recently enacted.

CARE AND REPAIR OF BOOKS. REBINDING

Closely connected with the use of school libraries is the care and repair of the books, for an array of books in good condition and attractively

bound will increase by many per cent the amount of reading voluntarily done. If the teacher has been properly trained, he can, with the aid of the pupils, easily do the simple repairing which is advisable. But rural-school teachers seldom suggest to their boards that books be sent to the binder. In five hundred one-room schools in Wisconsin, containing over 80,000 volumes, only 225 books had been rebound. In view of this condition a law was this year enacted providing that at the close of the school year the teacher shall set aside the library books which in his judgment should be rebound and the district board shall, at its next meeting, formally take action regarding the rebinding. A state committee is provided for, which is to prepare and distribute annually a list of approved bookbinding firms to which books may be sent for rebinding at stipulated prices.

WISCONSIN RURAL-SCHOOL LIBRARY LAW

It will be in harmony with the purposes of this paper to describe the rural-school library plan being carried out in one particular state. For this purpose I have chosen the state with whose school libraries I have some connection and to which reference has already been made.

The constitution of Wisconsin provides that:

> The income of the rural-school fund shall be applied to the support and maintenance of common schools in each school district, and in the purchase of suitable libraries and apparatus therefor.

Altho this constitutional provision went into effect in 1848, up to 1887 only 30,000 volumes had accumulated in school libraries outside of cities under city superintendents. In the latter year, however, a school-library law was enacted which with various amendments is, in substance, so far as they relate to rural-school libraries, as follows:

The county treasurer each year retains from the state school fund apportioned to the various school districts a sum amounting to ten cents for each person of school age in the towns and villages of his county. For the sums thus retained school library books are purchased, each school district being entitled to books in value proportional to the number of children of school age in the district.

Between April 1 and September 1, books for the various districts are ordered by the county superintendent from a firm which holds the contract for supplying them. The county superintendent must select the books from a list prepared under the direction of the state superintendent by the state library clerk.

Superintendents are required by law to keep complete lists of the books in the school libraries under their jurisdiction. For further aid in selection they may, and many of them do, ask principals and teachers to suggest what books they desire to have added to their school libraries.

The books thus selected and ordered are sent by the contractor to the town clerk who distributes them to the various school districts of the town,

as directed in a list of books sent him by the county superintendent. Upon receipt of the books in good condition the town clerk notifies the county clerk, who draws an order on the county treasurer for their payment. The book fund is thus carefully safeguarded. Transportation charges are paid by the town.

As a result of this school-library law, there are about one and a third million books in Wisconsin school libraries outside of cities under city superintendents. Over 80,000 volumes are being added to these school libraries annually, at a cost of about $50,000. Considerably over half of these additions go to libraries in one-room schools.

SPECIAL LIBRARY POSITIONS IN STATE DEPARTMENTS OF EDUCATION

The Wisconsin law, in common with that of most of the states, makes the state department of education the center of school-library work in the state.

With sufficient office and field force provided, state departments of education would seem to be in the best strategic position to supervise school-library work, which furthermore falls as naturally within their province as any other school activity. So far as I have been able to learn, however, Minnesota, New York, and Wisconsin are the only states which have thus far provided special positions within the state department of education for the supervision of school-library work. Considering the vast importance of school libraries, it seems reasonable to conclude that, if state departments of education are to justify their control of such libraries, they must build up strong library divisions. A reasonable degree of permanency of tenure in such positions, however, is essential to the success of the work.

INTERSTATE PUBLICITY AS AN AID TO FUTURE DEVELOPMENT OF RURAL-SCHOOL LIBRARIES

Even a cursory study of library conditions in the various states impresses one with the remarkable recent development of rural-school libraries. But one is also impressed with the great unevenness of this development, both among the states and within the states.

It is one of our advantages as a nation that one state in solving its own problems can learn from other states which have similar problems to solve. I am afraid that this advantage is far from being fully utilized with respect to libraries for rural schools. The library section of the National Education Association will serve an important cause by acting as a clearing-house of information for the rural-school library movement. If the states would arrive at some degree of uniformity and completeness with regard to statistics of such libraries, the United States Bureau of Education could be supplied with figures which would be made available to all if published in its annual reports.

RURAL-SCHOOL LIBRARY MOVEMENTS

Millions of books, in the aggregate, are in the libraries of rural schools where there was scarcely a book less than a generation ago. The activity which has brought this about needs to be organized into as definite a movement as any of those which are now revolutionizing education. I refer to industrial education, consolidation of rural schools, medical inspection, play and playgrounds, social centers, and other movements clearly defined in the popular mind. To none of these does the rural-school library movement yield in possibilities and importance, and among the agencies which have for their object the betterment of country life it holds a foremost place. And when this movement shall have attained its end we shall have an adequate and growing library in every rural school, with a teacher trained to stimulate and direct into right channels the reading of the pupils and of the community and to take advantage of every aid offered by the state, by the county, and by local public libraries.

DISCUSSION

E. M. Phillips, state commissioner of rural schools, St. Paul, Minn.—There are 7,000 rural schools in Minnesota, and 6,500 of these are provided with some kind of a school library. In these 7,000 schools there are a total of 1,000,000 volumes. The schools enroll 250,000 children. Then there are an average of 4 library books for each child. To state it another way, for each school enrolling 25 pupils, there is, in general, a library of 100 volumes. Numerically, we think that is a good showing for a young state.

These books have been paid for, half by the state and half by the school district. This policy of state library aid, begun in 1888 and still in vogue, accounts for anything phenomenal in the extent to which our rural schools have established libraries.

An intimate investigation of rural-school libraries revealed the fact that Grote's *Greece*, Gibbons' *Rome*, Macaulay's *England*, and Motley's *Dutch Republic* were very popular titles among the rural-school authorities who are intrusted with the selection of library books. One such dignitary defended his selection on the ground that they *wear* longer than other books. An investigation proved that his position was unassailable. Purchased in 1891, the volumes were in every respect as good as new in 1911. Not even had the leaves been cut. A good record for twenty years.

Recent inquiry together with some rather daring speculation left doubts as to whether the hundred-volume library for a school of twenty-five held more than an average of seventy-five volumes which were ever used, and more than fifty which were widely read. This was not primarily due to very poor lists but rather to unwise selection. Legally the right of selection is vested in the school board, and the right has commonly been asserted by them. Hence the nature of the average collection of books. Occasionally the authority to select has been delegated to the teacher, with slightly better results. In rare instances county superintendents of ability have asked for and received permission to direct the entire matter of library purchases, and in such counties excellent collections have been made. However, the task is too formidable for county superintendents generally, and quite impossible where special library training is lacking. Briefly, we have formulated at the end of a quarter-century what at its beginning we knew fairly well but provided for indifferently, that *there can be nothing but waste and inefficiency in establishing and upbuilding school libraries unless the function of selection be exercised by persons thoroly trained to the work.*

Recent legislation and educational practice in Minnesota are in co-operation to bring this about. In 1911 the legislature created the office of supervisor of public-school libraries in the Department of Public Instruction. Miss Martha Wilson, of Cleveland, Ohio, a trained librarian with excellent qualifications for this special work, has now given two years' splendid service, the results of which are patent. The nominal authority for compiling the library list has been transferred from the normal-school presidents to the state high-school board. Virtually, the list now in preparation will be solely Miss Wilson's work. And that disposes of the first difficulty of selection. The list from which rural schools must select books will be the best available.

To secure wise selection by districts is a larger problem. A collection of good books may be a very worthless school library. We need a balanced ration. This there is an effort to provide thru state interference in local affairs. The supervisor has prepared a list of two hundred volumes which, in her judgment, will make a very usable school library. Each rural district, as a condition for our quite liberal state aid, is required to continue the investment of a certain minimum amount annually in library books, until the entire two hundred volumes have been secured. It may purchase as much as it pleases outside of this list, but the annual minimum investment remains as a condition for state aid until each district has provided what the authorities consider a standard library of two hundred volumes.

In furtherance of the plan to improve conditions as to both selection and use of the library, instruction is given in every teachers' training agency in the state, from the normal schools down thru the college of education to the summer schools and institutes. Everywhere that two or three rural teachers, county superintendents, or rural-school officers assemble, there is the supervisor of school libraries in their midst, instructing and exhorting. The acquaintance thus secured brings many inquiries concerning the choice and use of books. As a consequence, the assistance of a professional librarian is placed at the disposal of the remotest rural district.

There are, of course, some principles of selection applicable to all school libraries. It is equally important that special community needs should be regarded in the process of selection. A rural-school library needs special consideration here. Minnesota's aim is to equip every rural teacher to meet this need. We seek to have collected with every rural-school library, properly labeled and arranged for accessibility, such bulletins and other agricultural publications of the national bureau and our own and other institutions as have an important bearing upon local agricultural activities and interests. The teacher finds, in her surroundings, strong incentive to familiarize herself sufficiently with this material to be able to furnish, to any interested patron of the school, really valuable information from the best authorities. No other recent activity has done so much to make our rural schools the centers of community interest, and to encourage their liberal support.

To make the library thus accessible for community use, a separate room is a necessity. A number of the newer buildings make such provision. As many new buildings are yearly erected, the state aid "club" will be used to encourage districts to provide a library room. All consolidated schoolhouses are so equipped. The sixty-five consolidated schools in operation this year report a total of twenty-five thousand volumes of standard library and reference works, and in addition, each one has begun the collection and indexing of informational material specially adapted to the agricultural interests of the community in which the school is located.

REPORT OF THE COMMITTEE ON NORMAL-SCHOOL LIBRARIES

The Committee on Normal-School Libraries submits the following report based on a study of existing conditions in the normal-school libraries of the United States in 1913.

A hasty look at the primitive normal-school library will prepare us to appreciate the marked contrast between then and now as shown by the investigation of the committee. In general, the normal-school library of a generation ago was a small, unclassified, little-used collection of books behind locked doors. The only normal-school library in New England having at present a trained librarian reports that six years ago a few reference books were scattered thru the assembly room and a few hundred circulating books in brown paper covers were in locked cases, the key of which was kept in a teacher's desk at the farther end of the building. These cases were unlocked twice a week for an hour or less. About seven years ago in a normal school of the state of New York, wire fencing with an opening large enough for handing out books and having a barbed wire on top was stretched in front of the bookstacks and charging desk. An attendant kept the library open two hours a day, but when outside reading for classes was required the boys in desperation scaled the fence for books. One of the now best organized libraries of Pennsylvania reports for thirty years ago a library of a few books with uncut leaves in a glass bookcase in the president's office, and a few hundred circulating books in the society libraries dispensed once a week in great state by a student. In 1891 the libraries were consolidated into one room which was kept open an hour or two daily by one of the teachers. Twenty-five years ago the normal-school libraries of Wisconsin were small and unorganized collections of from 1,000 to 2,500 books. The largest collection was behind locked doors and open half an hour on Friday afternoons. When in 1891–92 the cataloger employed to classify and organize these libraries asked to have the cases unlocked the reply was: "No, we had three books stolen last year." She assumed personal responsibility for the books and the cases were left open that year, and, in her own words: "You never saw anyone in your life so grateful as those students were to get a chance to use the books." To show what an innovation the card catalog was at that time in school work, she says that a nature-study class was sent to the new catalog to find the difference in size between the eggs of the humming bird and ostrich, and a geography class to find the average elevation of Europe. The oldest normal school in California reports practically no library in its early history. Twenty-five years ago, a student kept the library open during intermissions and a short time at the close of the school day, while the catalog of 1913 says that the library ranks first among the working tools of the school. One library reports that the untrained young

girl in charge about ten years ago was often found in tears because of the many demands made upon her and her utter inability to meet them. The early efforts of these libraries toward organization is most interesting reading and furnishes material itself for an entire paper. The pioneer effort toward the organization of normal-school libraries seems to have been that in Wisconsin about twenty years ago. Illinois, Michigan, Iowa, and Minnesota report organization beginning a few years later, while the schools of the South and far West report that their organized libraries have come into existence since 1900. Since 1907, twenty-two libraries have been organized according to modern methods, and nine within the past two years.

EXISTING CONDITIONS IN NORMAL-SCHOOL LIBRARIES OF THE UNITED STATES

A questionnaire covering the training of the librarian, the administration of the library, instruction of students in the use of books, and library co-operation has been sent, since January, 1913, to 213 normal and city training schools over the country, and the following report of conditions is based upon the replies received from 155 of these schools.

The normal-school librarian.—Fifty-one graduates of library schools are distributed as follows in the normal schools of the United States: Maine, 1; New York, 3 (two of these being in the New York City and Brooklyn training schools); New Jersey, 1; Ohio, 1; Pennsylvania, 3; Iowa, 2; Illinois, 7; Michigan, 3; Wisconsin, 6; North Dakota, 2; South Dakota, 1; North Carolina, 1; South Carolina, 1; Georgia, 1; Alabama, 1; Oklahoma, 1; Arizona, 1; Idaho, 2; Washington, 2; Oregon, 1; Kansas, 3; Nebraska, 3; Colorado, 1.

Seventeen librarians have had a summer course, eighteen the experience of a school or public library, and a very small number report having had a correspondence course or private lessons from a trained librarian.

Many of these librarians have had college training and teaching experience in college, high school, normal school, or grades. Most of the librarians in the modern organized libraries have the rank of a teacher, tho one reports "socially, but not otherwise." One librarian has the rank of assistant professor, and a small number rank as grade teachers. The salaries reported range from $750 to $2,500 a year, most of them being near $1,200, and tho the librarian has faculty rank, she has in most cases not the salary of the heads of departments.

Thirteen libraries reporting are in charge of a teacher, clerk, or student, and it would seem that the large number of schools leaving this question unanswered are provided for in the same way.

Twelve assistant librarians are graduates of a library school, distributed as follows: Indiana, 1; Illinois, 2; Michigan, 1; Iowa, 1; North Dakota, 1; Idaho, 2; Washington, 1; Kansas, 3; Nebraska, 1. Several of the assistants have had experience in a school or college library, and a few are college graduates with teaching experience. In Wisconsin most of the

assistants have had the summer library course at Madison, and in Illinois two assistants have had one year in the Illinois library school. Six assistants in Emporia, Kans., have had the course of library training offered by that normal school and three are library-school graduates. The majority of the libraries report student help paid by the hour, or no help at all. In one school practically all the work of the library is done gratis by a teacher.

Administration of the normal-school library.—The majority of normal-school libraries are still small, containing less than 10,000 volumes, but a great growth in number of volumes has been made within the past ten years. Thirty-eight schools contain more than 10,000 volumes, and five more than 30,000. Most of the libraries in California and Illinois are large. The Indiana state normal-school library is the largest, having 60,000 volumes, housed in a modern and completely equipped new building. Ten schools have no library tho one of them has 125 books from the education department at Washington, and no shelves on which to put them.

In former years, there was little or no opportunity in the normal school for the student to become familiar with children's literature. The schools now report collections of from 200 to 500 children's books, and the largest schools more than 1,000. These are, in most cases, not books for circulation among the children but are for the use of students in their study of children's literature and for pupil teachers for the preparation of lessons in the grades of the training school.

The amount spent annually for books varies from $50 to $500, and in the largest schools from $1,000 to $5,000.

The circulation of books in a school library cannot be recorded accurately, as the books are taken out for use mostly over night and for study periods. Many libraries have kept no record of the circulation of books or of the daily reference use of the library. The smaller and unorganized libraries report a circulation of 10 to 20 books, while the libraries showing greatest use have a daily circulation of 200 to 300 books. The Iowa State Teachers' College reports an average daily circulation of 800 books. The circulation of books has greatly increased in those libraries recently organized. One librarian says that since lessons have been given in the use of the library the circulation of books has doubled, and a teacher in another school says that the use of the library has increased 400 per cent since the appointment of a librarian.

The seating capacity varies from 40 to 200, the Iowa State Teachers' College having a seating capacity of 208 and a daily reference use of 1,000, and Tuskegee Institute a seating capacity of 215 and a daily reference use of 500 students. In several schools the library is used as a study-hall by students, a plan of which the librarian disapproves as the room is too crowded for the best reference use of the library.

The classification used in the libraries is almost uniformly the Dewey, tho a very small number use the Cutter, and two or three report an original

classification begun several years ago. A few schools have found it necessary to enlarge and adapt the classification of psychology, child-study, education, and children's books, to fit the needs of the school. The libraries having made most changes are the Brooklyn Training School for Teachers, and the state normal schools of Geneseo, N.Y., Emporia, Kans., and Los Angeles, Cal.

Library instruction in normal schools.—Lessons in the use of the library are given in fifty-three schools, the number of hours required varying from one to sixty, and the number of lessons in children's literature varying from one to twenty. Practice library lessons given by students are required in only six schools, and only five schools report lessons given in the grades of the model school. Twenty-nine schools require practice work in the library in connection with this instruction. Wisconsin and Idaho are the only states having a law requiring library instruction in the normal schools. In Wisconsin, library questions are included in the teacher's examinations for all certificates except third grade. In Illinois, the subject library methods is on the course of study, required by the state normal board, as an elective. Tho not required by state law, the course on library methods is required for graduation by most of the fifty-three normal schools, tho credit is not always given for the work. The time for these library lessons is provided for by periods taken from the school economy, pedagogy, or English classes. The librarian of Cheney, Wash., takes the recitation periods of teachers who are away from school giving institute lectures. One librarian, just appointed to a normal school in Pennsylvania, has given weekly talks at chapel on classification, etc., which she supplemented by a library number of the school paper. Several schools not included among the fifty-three give instruction incidentally or to individual students on the use of the library.

In addition to lessons on the use of books and on children's literature, several schools give an elective course for teacher-librarians with the aim of preparing a few teachers to administer a small school library in addition to part teaching. Geneseo, N.Y., is an example of a school giving the teacher-librarian course. Commissioner Draper, in his report of 1911 for the education department of New York state, says that the teaching function of the librarian in the schools must be recognized, and he urges the appointment in the small school libraries of teacher-librarians trained to select and organize the school library and to train teachers and pupils in its use. In New York state, Geneseo was designated as the normal school to introduce the teacher-librarian course with the purpose of providing for the small school library that can never afford as librarian the graduate of a library school. This course requires one period a day during the two years' course either in recitation or in practice work, and especial attention is given to children's literature and to practice lessons with children. Summer courses in many of the schools meet the needs of teacher-librarians in

the small school libraries. In Michigan, the State Board of Library Commissioners offers an elective course during the summer session receiving six to twelve weeks' credit.

With a few exceptions, library instruction has been introduced within the last five years into the normal schools. At least one school in Wisconsin, Illinois, and Minnesota has given this work for twelve years, one school in New York, South Carolina, Massachusetts, and the summer session of Michigan for seven years, one in Kansas for eleven years, one in North Carolina for nine years. Fifteen schools have introduced library methods within the past two years, and several schools are investigating the work done by other schools in preparation for a course during the summer sessions of 1913 or next year.

Two or three librarians recently appointed have felt it necessary to organize the library before attempting any instruction in its use. Three or more schools have reported that the courses of library instruction have been crowded out because of a change of principal or course of study or an overcrowded schedule, but in each case the work is to be introduced again, as soon as possible.

In reply to the topic "Effect of This Instruction on School Work," the schools without an exception say that interest in the library is stimulated, reference work is made easy, students' attitude toward research work has changed, there is more joy in study, and time is saved for reading. One librarian says that if a special student does not get into this course she regrets it. Another says that reference work is done in one-half the time since students have been taught how to use the library.

EFFECT OF LIBRARY METHODS ON THE SCHOOL LIBRARIES AND SCHOOL WORK IN THE STATE

Some librarians say that this instruction has been given too short a time to report any effect, others already notice results. A librarian of Pennsylvania says that judging from letters and reports the effects are far-reaching. More school libraries are being organized and more interest is being taken in them by teachers, and students are being prepared to use the public library. In Illinois the school libraries are improving in number and quality and graduates often write for information about book buying. In some cases school boards have offered $100 for a library when they discovered a teacher who could organize and care for it. The school superintendents in Wisconsin report improvement in school libraries and their use. In Idaho there is an increasing number of requests from graduates for assistance in organizing school libraries. The librarian of Cheney, Wash., sent letters to graduates who had taken library methods, asking for reports of their work. The reports showed that teachers were buying school libraries and were enthusiastic over their work. In South Carolina the greatest good has come from the organization of libraries of 100 to 200

volumes in schools all over the state. Emporia, Kans., furnished the first trained high-school librarian in the state, and supervised the normal students in organizing the high-school library of Emporia. At least seven librarians in Kansas have had the training of the normal-school course in library work. The organization of school libraries and a recognition of the need of library instruction in grades and high school has also resulted in Kansas from the library instruction of the normal school.

THE NEEDS OF NORMAL-SCHOOL LIBRARIES

The greatest needs of normal-school libraries as reported by their own librarians are as follows: Thirty-one libraries are in need of more room. Thirty-three are crying for more books, the greatest book needs being bound magazines, children's books, duplicates, late indexes and reference books, and late works in general literature. Thirteen schools give money as the greatest need of the library and as money will supply the demand for more room, a trained librarian, more books and equipment, it can be said that all of the libraries are in need of greater appropriations. Eighteen schools report the need of more assistants; eight, of organization; a small number, of a trained librarian and of required lessons in the use of the library. One librarian says that the greatest need is a state board that can appreciate the work of the library; another, less red tape in connection with the state board of education; another, continuation of past support and staff by the new state board of educational administration. Since the libraries generally seem to be outgrowing their present rooms it is encouraging that ten schools announce new buildings or library rooms for another year.

ORGANIZATION OF NORMAL-SCHOOL LIBRARIANS

Altho the problems of the normal-school library have been presented since the organization of the Library Department of the National Education Association, in 1896, by normal-school principals and librarians, also in many associations of teachers, until within the past two years librarians have not met together to discuss their problems either in states or in sections of the country. The first movement toward the organization of normal-school librarians was a conference in Wisconsin, held at Oshkosh in October, 1911. About twenty problems of normal-school library work were discussed, and three of the resolutions adopted were that assistant librarians be made members of the school faculty, that the course of library readings be reinstated, and that teacher-librarians should be employed in those communities needing more effective library work.

In Pennsylvania a paper giving the results of an investigation of normal-school libraries of that state was read in 1911 before the library section of the Keystone Library Association. A resolution was sent to the Board of Principals of Normal Schools and a meeting of normal-school librarians was called at Harrisburg in connection with the Library Commis-

sion. A course of library lessons was outlined and all the schools went to work. The librarian of Tempe, Ariz., writes that she had hoped to organize a library association but that distances are so great it is a difficult problem.

Thru the efforts of Mr. Kerr, of Emporia, and Miss Ovitz, of Milwaukee, the normal-school librarians of the Middle West met in Chicago in January, 1913, at the time of the midwinter meetings of the American Library Association Council, and the college and university librarians. Eighteen normal schools in eight states were represented and a committee was appointed to continue the organization and co-operate with other library interests.

The first national conference of normal-school librarians was held at the Hotel Kaaterskill, in the Catskills, during the meeting of the American Library Association in June, 1913. Problems were discussed and a committee appointed to arrange for a similar meeting next year. A second national conference is planned in connection with the meeting of the Library Department of the National Education Association.

OBSERVATIONS DRAWN FROM THE YEAR'S STUDY OF THE NORMAL-SCHOOL LIBRARY SITUATION

First: The moving spirit in every center of great activity is the librarian or a teacher with an understanding of the modern library. Any account of the normal-school library movement would be incomplete without mention of the services of the pioneer workers who have not been routine librarians working schedule hours, but real educators with the insight and courage of the reformer. One of these pioneers, a Wellesley college graduate teaching in a normal school in Maine, realized the possibilities of school work with the library as a working laboratory, and took a library course in preparation for organizing her own normal-school library. She has since been responsible for the organization of both the normal-school library and a new public library, doing a great part of the work during summer vacations without pay, or nights after a day of teaching. Her inspiring efforts have reached the entire state, thru talks at teachers' institutes, summer library courses at the normal schools, and talks before the State Teachers' Association and State Federation of Women's Clubs.

There are a score of such pioneers who are working in this way, making real sacrifices in time, strength, and money. At great personal expense they attend state and national meetings to help in the organization of school librarians, and the tremendous recent advancement in school library work is due to their unceasing efforts.

The recent school library awakening of the South is due largely to the efforts of Mr. Louis R. Wilson, who in 1911 outlined before the Southern Educational Association a plan for the betterment of school libraries. Since then he has been asked by the state authorities to prepare a statement of means of increasing the effectiveness of school libraries, also to

submit plans for teachers' library courses for the new Peabody College of Nashville, which is to be *the* normal school for the entire South.

In Kansas, Mr. Kerr by means of a carefully prepared and explained exhibit for the State Teachers' Association secured the indorsement of their movement for a library organizer in that state.

School-library exhibits have been sent to several state teachers' associations and have been very much enjoyed and appreciated. In Maine, New York, Michigan, Pennsylvania, Washington, and California papers on normal-school library work have been read at the state teachers' associations.

In Tempe, Ariz., the librarian, Miss Wright, met the education committee of the Senate soon after the meeting of the first state legislature, to explain the work of library commissions of other states. She has also served as a bureau of information to which teachers write for help. Chico, Cal., and other normal schools supply the needs of rural-school libraries in the near vicinity.

The normal-school library in these cases and many others has been a real educator, contributing toward the library betterment of the state.

Second: From the unorganized condition still existing in many normal-school libraries, it would seem that school men have still to be convinced that the library is an educational institution and a fundamental need greater in importance than any other working laboratory of the school. The problem of convincing the school men of the importance of the school library belongs fundamentally to the college and university. The educators and leaders in thought of the school world are trained in the university and normal college. Mr. Wilson, of the University of North Carolina, insists that, at least in the South, the universities must lead the way. The universities of Virginia, North Carolina, South Carolina, and Tennessee are notable examples of schools giving teachers' courses in library instruction worthy the attention of university students, and officially recognized in the university catalog. Such courses, on an equal footing, so far as credits for a degree go, with every other subject, give the idea of library instruction value thruout the educational public of the state.

Other means of reaching the educational leaders in the interest of school library work are normal-school library committees appointed by the state library association, appeals to the state commissioners of education by the library commissions, and the efforts of state and national organizations of normal-school librarians.

Third: Time is wasted in the normal schools because of the preliminary library instruction now necessary on the use of the catalog and of books which should have been given in the graded or high schools. In the years to come students should enter the teachers' training school equipped by the high school to use the common tools of the library. Then the normal school can offer its own legitimate courses on special reference books for

teachers, children's literature, practice work in giving library lessons to children, and elective technical courses for teacher-librarians.

Another observation upon the library instruction given in normal schools is that the weakest points of the present library course are the lack of practice lessons taught by the student and of library lessons given in the grades of the training or model school. Unless the normal student is required to give practice lessons in the grades or high school, she is not likely to give such lessons in her own school. As one normal-school librarian says:

> We can instruct the normal students until Doomsday, but unless we outline a course for the grades and show the prospective teacher just how the work is to be presented, few will have the initiative or originality to give it to the pupils they are to teach.

It is not enough that the coming teacher sees such lessons given by the librarian, she must try them herself while in the training school. Another librarian says that the lessons most promising of results are those in which students handle children's books and get interested in the importance of books in the schools in which they are to teach. In the beginning of library courses in the normal schools, too much emphasis was placed on technical instruction. The later courses have been based upon the greatest need of teachers which all schools heretofore have failed to supply, knowledge of children's books, and bibliographical aids for teachers. School-library work is becoming less technical and more human.

Fourth: There is need of a handbook outlining courses of library instruction and giving lists of best articles and helps in normal-school library work. Requests from libraries now being organized are constantly coming to the schools already giving library instruction. More than thirty schools have sent with their replies to questionnaires typewritten or printed outlines of their courses in library methods. A handbook combining the best points in all these courses and in addition containing down-to-date lists of best articles and helps would tend to unify and organize school-library work.

RECOMMENDATIONS SUBMITTED FOR THE BETTERMENT OF NORMAL-SCHOOL LIBRARIES

1. That of first and prime importance is the appointment in every normal and teachers' training school of a trained librarian having rank and salary of the head of a department.

2. That library lessons should be given in the grades and high schools in order that normal schools may specialize on library courses for prospective teachers.

That normal colleges and state universities should give library instruction to the end that the leaders of the educational world may recognize the value of the school library.

That normal schools in their required library lessons should place the

emphasis on children's literature and practice lessons given by the prospective teachers and that technical library instruction be reserved for elective teacher-librarian courses.

3. That a handbook be compiled and an effort made by the organized normal-school librarians of the United States to secure its publication and free distribution among normal schools by the education department at Washington.

4. That an effort be made to secure the publication in educational magazines of some of the best articles on normal-school library work.

5. That an effort be made to bring about centralized supervision of school libraries thru a school supervisor for each state and for the whole of the United States.

Committee

Ida M. Mendenhall, Tomkins Cove, N.Y., *Chairman*
Mary C. Richardson, state normal school, Castine, Me.
O. H. Bakeless, state normal school, Bloomsburg, Pa.
Louis R. Wilson, University of North Carolina, Chapel Hill, N.C.
Delia G. Ovitz, state normal school, Milwaukee, Wis.
Willis H. Kerr, state normal school, Emporia, Kans.
Margaret Dold, state normal school, Chico, Cal.
Ruth M. Wright, state normal school, Tempe, Ariz.
Mabel M. Reynolds, state normal school, Cheney, Wash.

TRAINING HIGH-SCHOOL STUDENTS IN THE USE OF THE LIBRARY

LUCILE F. FARGO, LIBRARIAN, NORTH CENTRAL HIGH SCHOOL, SPOKANE, WASH.

The history of library work, like Gaul, may be divided into three parts. Or better, it may be considered as having three epochs, each characterized by certain distinct ideals, each closely related to the educational ideas of its time, each fragrant with culture and the devotion of the booklover.

The first of these I may call the scholarly epoch, the time when the library was a carefully clothed, a carefully housed, and a carefully guarded collection of books. As the *Old Librarians' Almanac* says:

> Keep your Books behind stout Gratings and in no wise let any Person come at them to take them from the Shelf except yourself. Have in Mind the Counsel of Master Enoch Sneed (that most Worthy Librarian) who says: It were better that no Person enter the Library (save the Librarian Himself) and that the Books be kept in Safety, than that one Book be lost, or others Misplac'd. Guard well your Books—this is always your foremost Duty. . . . So far as your Authority will permit of it, exercise great Discrimination as to which Persons shall be admitted to the use of the Library. For the Treasure House of Literature is no more to be thrown open to the ravages of the unreasoning Mob, than is a fair Garden to be laid unprotected at the Mercy of a Swarm of Beasts.

The second epoch came. Free schools were established. Public high schools began to take the place of seminaries and academies. The first free public libraries were organized. Then began a period of marvelous library development—a sort of Lady Bountiful period, in which buildings and equipment multiplied and the library became a missionary and went out into the highways and byways to carry free books to the lumberman in the mountains and the foreigner in the slums. We are still living in that period—a time when the public library comes to the school with its classroom collections, its lists of books for summer reading, its duplicate reference sets for high-school students, and even its briefs for the high-school debater, signed, sealed, and delivered, with a bibliography attached.

But we are beginning to catch a still larger glimpse of the possibilities of library work. The third period is in its infancy, but it has begun. I hesitate to use a word which to many minds means only teachers' examinations and perspiring hours spent in the pursuit of knowledge via White's *School Management*. But the third epoch is the pedagogical one. "The library the people's university" is a phrase that slides easily from the pen of the reporter. And so readily does it write itself that only a few are seeing its real significance.

The library as an educational institution demands the recognition of established educational principles. This is no more true of the school library than of the public library, but we are just now considering the needs of the high school and I am glad to have an opportunity to point out what seem to me to be some of those underlying principles.

First of all there is the preparation of the librarian. As long as the storehouse idea prevailed, there was no good reason why the librarian should be anything more than a clerk. But if the school library is to be an active educational agent, its presiding genius must be a specialist, and a thoroly prepared one. High schools require their teachers to be the possessors of college degrees. The librarian comes into vital touch with the entire teaching force and the entire student body. Have not school authorities a right to demand of her the same broad education plus adequate technical training? And if this is demanded, it follows that the high-school librarian must be granted the salary of a teacher rather than that of a clerk. I am positive that only as she is recognized as the peer of the teaching force in every way, in training *and salary*, will she be able to make of the library what it really ought to be—a department of the school as the college library is of the college. A man who has had long experience as an educator said to me recently: "If I were a school superintendent again with a faculty of ten in the high school, I would insist that one of the ten must be a librarian. And I would do it on the principle that a properly administered and active library was an essential element in the work of the school."

The proper location and equipment of the school library are also vitally important points. May the study-hall profitably be combined with the

library? Is the location of books in a near-by branch of the public library a satisfactory arrangement, pedagogically considered? These are questions to be considered by school and library officials in view of local conditions. But granted a library in the school building, there must be adequate accommodation for books and readers. There must be careful selection of books, for a school library cannot afford to store dead wood. There must be proper equipment in the way of catalog cases and filing cases, if the books and other material are to be put to the best use.

Given the books, given some sort of adequate accommodation and equipment, and given a librarian who is familiar with library methods, what still remains? Surely the application of pedagogical principles.

I think most high-school librarians are already adepts in the art of suggestion and the arousing of interest. We all put pictures on the walls and plants in the windows in order to make the room the most attractive place in the building; we all get up posters and lists, and scatter fascinating volumes here and there on the tables in the hope of tempting the taste of the unwary pupil; we get the economics class to furnish clippings for the bulletin board in the hope of arousing interest in current events; we drop remarks about "that splendid story I read in the *Atlantic* last week by the same author as you have there—you must be sure to read it." And still a large part of our library work with boys and girls misses fire.

High-school boys and girls like best those things which they do for themselves. If John can be taught to use the card catalog and find his own books on the shelves he will use twice as many books, for he isn't afraid of "bothering" and besides, the feat of locating a set or a volume on the shelves, or finding material on a certain topic thru the index to magazine articles, is as good as a game. Moreover, it gives him a pleasant feeling of importance when Professor White says to him in the civics class, "Now there's that matter of the judicial recall—I wish you would go down to the library before tomorrow's recitation and make an abstract of such articles as you can find in favor of it and report to the class."

But it is telling only half the story to say that high-school boys and girls like to do library work for themselves. It is a part of their education for them to learn to do it. Where, better than in the library, can the pupil learn to judge and to discriminate? Where is there a better chance for him to develop initiative and to pursue those lines of thought and study that really interest him?

My plea, then, is for a library training course in every high school. Such a course should teach the student the intelligent use of library tools like the card catalog, the periodical indexes and bibliographies. It should make him familiar with at least a small group of books of ready reference—the *Statesman's Yearbook*, the almanac, the gazetteer, the encyclopedias, both general and special, dictionaries, and debating aids. It should require

him to make practical use of his knowledge in as many ways as possible—by the preparation of bibliographies, by frequent reference assignments involving the use of indexes and cross-references.

I am aware that the chief obstacles in presenting such a course in any given high school are the already crowded condition of the course of study and the lack of time on the part of the librarian. May I tell you how these obstacles have been overcome in the school which I represent?

We have made a series of library lessons an integral part of the English course, the lessons being given by the English teachers with the exception of one or two. For instance, the Freshmen B's spend several days investigating the standard encyclopedias and dictionaries. Sample pages of these have been obtained from the publishers in large numbers so that it is possible for each member of the class to have in hand an actual page of the "big" dictionary while he and his teacher talk about the arrangement of material, definitions, synonyms, derivations, obsolete words, and slang phrases. These same Freshmen B's spend at least one recitation period in the library early in the semester. After a lecture from the librarian on the use of the catalog and the arrangement of the books on the shelves, they all try their hand at hunting up a volume for themselves. Then their teacher assigns each a subject for a bibliography, and this they work out carefully and hand in as an exercise, or perhaps as the basis of next week's theme. A little later they are introduced to the *Reader's Guide*, back numbers of which are sent up to the classroom if the teacher so desires. Somebody, or perhaps the whole class, will be asked to prepare a list of the magazines subscribed for by the library. Reports on the merits and characteristics of these periodicals will later be given as oral themes and again will come the preparation of a bibliography, this time on a subject that necessitates the use of the *Reader's Guide* as well as the card catalog.

I cannot go further into details. Other lessons give the pupils a hand-to-hand acquaintance with certain other standard reference books and sets, such as books of quotations, almanacs, gazetteers, atlases, Shakespeare concordances, Warner's *Library of the World's Best Literature*, Bliss's *Encyclopedia of Social Reform*, and Larned's *History for Ready Reference*. There is one lecture on the choice of books for a personal library. This is usually given to the Seniors by the librarian. At first we spread out the work thru the entire four years of the English course. Lately we have come to the conclusion that this was a mistake. We want the pupil to know at the very outset of his high-school course how to make the best use of his high-school library and the public library. And so the formal instruction is largely given in the Freshman year, with the understanding that advanced classes are to be kept constantly in practice thru reference assignments, debate work, and the frequent preparation of bibliographies—all in connection with the regular classroom work in English.

Can the English teachers do the work? Some of them have had normal-school preparation for just such work. Those not so fortunate have made good use of aids like Ward's *Practical Use of Books and Libraries*, and such typewritten exercises and courses of study as we could secure from other schools. Best of all, the almost universal verdict has been that this was the most suggestive, the most interesting, and the most useful form of English work possible.

The great cry in the modern high school is for the practical. Library training makes of the school library a laboratory and a workshop, putting into the hands of the pupil the necessary tools for further achievement in his chosen field. It is practical. At the same time nothing is lost on the side of culture. We can still make the school library the most beautiful, the most alluring spot in the building, we can encourage the boy who likes to browse and the girl who has taste. We shall have time to do so, for in learning to help themselves our boys and girls will have made it more possible for us to help them.

DEPARTMENT OF SPECIAL EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—CARRIE B. LEVY, supervisor of classes for the blind, public schools. . Milwaukee, Wis.
Vice-President—HARRIS TAYLOR, principal, Institution for the Improved Instruction of Deaf Mutes.... New York, N.Y.
Secretary—M. P. E. GROSZMANN, educational director, National Association for the Study and Education of Exceptional Children.... Plainfield, N.J.

FIRST SESSION—WEDNESDAY AFTERNOON, JULY 9, 1913

The department was called to order in Whitney Hall at 2:30 P.M. with President Carrie B. Levy in the chair.

The chair then appointed the nominating committee.

The general topic of the session was "The Special Child—The Need of Prevention of Bringing into the World the Defective, Exceptional, Abnormal, Atypical Child—the Blind, the Deaf, and the Cripple." Under this topic, the following program was given:

"Causes of Deafness"—Frank M. Driggs, superintendent of the School for the Deaf and Blind, Ogden, Utah.

"Saving Sight and Saving Citizens"—Edward M. Van Cleve, superintendent of Ohio State School for the Blind, and member of the Board of Directors of the American Association for the Conservation of Vision, Columbus, Ohio.

This lecture was of a most informal character and was illustrated with excellent motion pictures and other lantern slides collected from various parts of the United States.

The Volta Bureau, Washington, D.C., had an exhibit of charts, etc., showing work for the education and promotion of the general welfare of the deaf, including especially the studies of Alexander Graham Bell. A representative of the Volta Bureau explained its workings to the department.

SECOND SESSION—FRIDAY AFTERNOON, JULY 11, 1913

The department met in Whitney Hall at 2:30 P.M., and was called to order by the president.

The following program was given:

"Exceptional Children: Why?"—Maximilian P. E. Groszmann, educational director, National Association for the Study and Education of Exceptional Children, Plainfield, N.J.

"Fit and Unfit Matings"—C. B. Davenport, Carnegie Institute of Washington, director of Department of Experimental Evolution, Cold Spring Harbor, Long Island, N.Y.

Discussions.

The president stated that in 1911 a committee was appointed to collect data relative to the legal status of exceptional children. At the 1912 meeting, as no one was present to report, the committee was continued and asked to make a preliminary report at the 1913 meeting. Maximilian P. E. Groszmann, as chairman of the committee, then stated that the committee, as ordered, had placed itself in communication with the United States Bureau of Education, which had made an effort to compile the data required from their records. Changes in the personnel of the bureau and lack of funds, however, made further work impossible. Dr. Groszmann asked to continue the committee so that it might make further efforts. It was so ordered.

The president further reported that at the 1912 meeting the secretary was instructed to request the United States Bureau of Education to publish for distribution the report of the Committee on Prevention of Blindness and Conservation of Vision.

The secretary communicated with J. C. Boykin, of the Department of the Interior, Washington, D.C., and ascertained that the Bureau of Education wished to combine the report with one being prepared by F. B. Dresslar, specialist in school hygiene and sanitation, Bureau of Education, Washington, D.C.

The Committee on Nominations submitted the following report:

For *President*—Maximilian P. E. Groszmann, educational director, National Association for the Study and Education of Exceptional Children, Plainfield, N.J.

For *Vice-President*—John B. Curtis, supervisor, School for the Blind, Chicago, Ill.

For *Secretary*—W. E. Taylor, superintendent, Idaho School for the Deaf and Blind, Gooding, Idaho.

These nominations were unanimously accepted and the officers duly declared elected for the ensuing year.

The meeting then adjourned.

MAXIMILIAN P. E. GROSZMANN, *Secretary*

PAPERS AND DISCUSSIONS

CAUSES OF DEAFNESS

FRANK M. DRIGGS, SUPERINTENDENT OF THE SCHOOL FOR THE DEAF AND BLIND, OGDEN, UTAH

A study of the causes of deafness brings forth the fact that the census reports and the information obtained thru the schools for the deaf are incomplete and far from accurate. The census enumerators have undoubtedly done their work well. The heads of the various schools have been careful. The primary cause of the inaccuracy is due to the fact that many parents do not know the real cause of the deafness of their children, or if they do know they fail to give the desired information. It is often impossible to obtain from parents, or guardians, any reliable information, any actual cause of deafness, or any accurate knowledge of their ancestry with or without reference to defects in either side of the family tree. Very often the causes given are absurd and unsatisfactory. We can, however, from the census figures and from other reports obtain sufficient data so as to draw some interesting conclusions.

Dr. G. Hudson Makuen, an eminent authority on deafness, causes and prevention, says:

> Deafness is a symptom and not a disease, and just as long as the human organism is subject to disease, just so long will there be the symptoms or results of disease, of which deafness is a type.
>
> There are two kinds of deafness, viz., that which is a part of the inheritance of the child, or congenital deafness, and that which is the result of disease later on, or acquired deafness. This is a more or less arbitrary division, for nearly all deafness is acquired either before or after birth and the child inherits merely a tendency to the acquisition of certain morbid conditions which result in deafness and which may be of either prenatal or postnatal development.

We have then this classification: (1) the deaf, meaning the whole class of deaf people, (2) the congenitally deaf, those who are born deaf or lose their hearing in very early infancy and are thought to have been so born, and (3) the adventitiously deaf, those who acquire deafness after birth, usually in early childhood.

There are various degrees of deafness, from the person who is slightly hard of hearing to the one who is totally deaf.

From a report by Dr. E. A. Fay, an authority on the causes of deafness, we learn that the census reports from fifteen countries of Europe give more cases of congenital than acquired deafness. The census reports of the United States of 1880 give a similar report, yet the difference is not so great. In the same statistics we find that the reported cases from twenty European and seventeen American schools for the deaf show an excess of acquired deafness.

From my own figures from reports received from schools for the deaf this year and including more than eight thousand deaf children, 32 per cent are reported as congenitally deaf, 14 per cent with no known cause, and the rest, 54 per cent, as being adventitiously deaf. A complete summary of the causes as reported will be given later.

Now as to the causes of deafness:

Dr. G. Hudson Makuen says that about 50 per cent of congenital deafness is the direct product of consanguineous and deaf-mute marriages.

Dr. E. A. Fay and Dr. Alexander Graham Bell both agree that there is a hereditary tendency toward deafness thru consanguinity and that the possession of deaf relatives is a most important element in determining the production of deaf offspring.

Mr. Stoddard Goodhue in a recent issue of the *Cosmopolitan* has this to say:

> There is danger in cousins marrying. Consider this complication. A young man falls in love with his cousin; and they ignore the fact that one of their common grandparents was deaf. The two cousins marry and have four children, of whom two are born deaf.
>
> Here the hereditary defect skipped two generations, and there is reason to suppose that it would not have reappeared but for the union of cousins. The justification for this belief is found in the fact that deafness may be due to a good many different conditions, so the marriage of unrelated deaf-mutes resulted in deafness in only about one-fourth of the offspring. (Other authorities give a lower percentage than this.) But when the parents are related—belonging therefore to the same type or strain of deafness—the percentage of marriages yielding deaf children increases in proportion to the closeness of relationship of the parents. In one case where the marriage partners were nephew and aunt, 75 per cent of the children were deaf.

The very fact that the marriage of persons having the same defects intensifies those defects in the union of the strains that carry them makes it seem imperative that congenitally deaf persons should not marry other congenitally deaf persons. Especially is this true where there is a positive hereditary tendency toward deafness.

There are in Utah quite a number of deaf married couples, perhaps thirty such unions. In three instances both partners are congenitally and hereditarily deaf. In about twenty cases one of the partners is congenitally deaf. Two-thirds of these thirty couples have children and in only one instance is there a deaf child. In this one instance there is a deafness in the families of both parents.

Dr. Fay says:

> While the principle of heredity is clearly established as an indirect cause of deafness, it is a curious fact that, in a great majority of cases, the defect is not transmitted by deaf parents to their children. Statistics have shown that many married deaf have not deaf children, and that, with deaf parents as with hearing parents, hearing children are the rule, deaf children the exception; but they also show, especially when a large number of such cases are brought together, that the proportion of these exceptions with deaf parents is far greater than with hearing parents. Yet the proportion of deaf children to the whole number of such children is greater than the proportion of the deaf to the whole population.

Scrofula seems to have an indirect effect, or to be a cause of deafness in many cases. The fact that many deaf children show traces of scrofula leads many authorities to consider this a cause of deafness.

The principal causes of acquired deafness are from diseases and accidents.

In a report in the *American Annals* (1888), by Dr. E. A. Fay, we find out of 9,209 reported cases the following:

Meningitis	2,856
Scarlet fever	2,695
Malarial and typhoid fever	571
Measles	448
Fevers—non-malarial	381
Catarrh and catarrhal fevers	324
Other inflammations of the air passages	142
Falls	323
Teething	54
Mumps	51
Smallpox and variola	47
Erysipelas	36
Fright	32
Water in the ear	25
Sunstroke	21
Noises and concussions	21
Tumors	11
Chickenpox	10
Abscesses	281
Whooping cough	195
Nervous affections	170
Scrofula	131
Quinine	78
Blows and contusions	74
Inflammations of the ear	72
Diphtheria	70
Hydrocephalus	63
Struck by lightning	10
Foreign bodies in the ear	9
Salt rheum	3
Malformation of the ear	2
Syphilis	2
Consumption	1
Total	9,209

From the United States Census (1900), Table XXXVIII and Diagram 33, we obtain from the classified cases the following principal causes:

Scarlet fever	7,424	
Disease of ear	4,210	
Measles	2,469	
Influenza	1,776	
Catarrh	11,702	
Colds	3,074	
Malarial fever and quinine	1,636	
Meningitis	3,991	
Brain fever	2,013	
Typhoid fever	2,055	
		40,350
Minor Causes		7,617
Aggregate classified		47,967

And from Diagram 34 we get from the unclassified cases the following:

Congenital	14,472	
Old age	3,361	
Military service	3,242	
Falls and blows	2,243	
Sickness	2,143	
Fever	1,436	
Hereditary	909	
		27,806
Minor causes		3,399
Aggregate unclassified		31,205

The following table gives the causes as given in the recent reports I have received from the superintendents of a number of schools for the deaf of America:

			Utah
Congenital	2,570	0.319	0.32
Unknown	1,119	.139	.193
Meningitis	851	.105	.13
Scarlet fever	629	.078	.07
Brain fever	372	.046	.....
Measles	233	.028	.028
Accidents	210	.027	.025
Typhoid	158	.019	.019
Whooping cough	152	.019	.019
Catarrh	140	.017	.012
Diphtheria	61	.007	.016
Grippe	47	.006	.009
Miscellaneous	1,514	0.19	0.159
Total	8,056	1.000	1.000

From the census reports, statistics, and tables, and from the authorities already quoted I find the following interesting facts:

First: The largest proportion deaf from the classified causes is found in Maine, New Hampshire, and Vermont.

Second: The largest ratios of congenital deaf are found in a group of states comprising Kentucky, Tennessee, Virginia, and North Carolina, also Maine. The largest percentage is found in the state of North Carolina.

Third: A strange coincidence is that those sections having the least sunshine have the largest ratios of deafness from affections of the middle ear.

Fourth: The congenitally deaf form the mass of those who lost hearing before the age of two years, and among the non-congenital cases scarlet fever, disease of ear, measles, meningitis, and brain fever seem to predominate over other causes assigned.

Fifth: Between the ages of two and five we find that scarlet fever and meningitis are the principal causes of deafness. Diseases of the ear and brain fever are next in importance. Sixty-five per cent of the cases due to brain fever occur before the age of five.

Sixth: Scarlet fever is the leading cause of deafness between the ages of five and ten.

Seventh: No single cause seems to predominate between ten and fifteen.

Eighth: Catarrh becomes the leading cause of all deafness after fifteen years of age.

Ninth: Congenital deafness occurs exclusively at birth or in early infancy. Practically all deafness from catarrh comes in adult life; 90 per cent of all deafness from scarlet fever, meningitis, and brain fever, more than 75 per cent of deafness from measles, and 65 per cent of deafness from diseases of the ear occur in childhood.

Tenth: One-third of all deaf children have some deaf relatives.

Eleventh: The percentage of born deaf and deaf from "hereditary" causes is greater among those who have deaf relatives than among those who have not.

Twelfth: The percentage of congenitally deaf is nearly three times as great among those whose parents were cousins as among those whose parents were not.

Without wearying you with more data and other figures I shall present my conclusions.

1. There is much need of the study of eugenics, the gathering of data concerning the presence of deafness in the ancestry of the children in schools for the deaf.

2. There is need of more careful records of the causes of deafness.

3. There is need of careful records of the marriages of deaf persons and of their offspring.

4. There is need of laws preventing the marriage of persons where both families have the same defective strains, or defective hereditary tendencies.

5. There is need of more careful selection of the parents of our children if we would prevent congenital and hereditary deafness.

6. There is need of more scientific nursing and medical attention with the children who contract the diseases that frequently cause deafness.

Finally, my friends, I believe we are at the beginning of a period when more attention is to be paid to the study of eugenics, and to the breeding of more perfect human beings. The day is dawning when there shall be greater co-operation between the teachers and the doctors in the study of children, causes of defect, prevention of disease, and hereditary tendencies. May we not rejoice in the coming of this day in the hope that it will bring to the children of tomorrow fewer sorrows, fewer handicaps, and fewer sins from generations of yesterday and today, and leave as our heritage a more perfect race, a better world?

EXCEPTIONAL CHILDREN: WHY?

MAXIMILIAN P. E. GROSZMANN, EDUCATIONAL DIRECTOR, NATIONAL ASSOCIATION FOR THE STUDY AND EDUCATION OF EXCEPTIONAL CHILDREN, PLAINFIELD, N.J.

Even after these years of careful study of many classes of exceptional children, the terminology and classification employed are loose and arbitrary. It is true that the term "exceptional" as a general term, denoting all kinds of deviations from what has been called the ordinary average, has recently been adopted by many after it had been suggested by the writer of this paper as long as ten years ago. But there is still much confusion and uncertainty in diagnosis and terminology.

In order that this paper may be of value, its terminology must be understood. I can only refer to my repeatedly published *Tentative Classification of Exceptional Children*, which, in its crude form, as early as 1903, was favorably commented upon by Cesare Lombroso, and which, in its revised form, was first presented to the American Academy of Medicine in 1909.

"Abnormal" children, in this classification, are those who are distinctly feeble-minded, insane, or moral imbeciles and perverts, and will need custodial care thru life, being unfit to live independently in modern human society. The number of these has been greatly overrated. Any individual who did not easily respond to more or less superficial testing has been grouped low, and thus our census figures are no doubt exaggerated. Even the more scientific methods of testing are still crude. It is conceded even by those who believe in the efficacy of the Binet-Simon Measuring Scale that it has the tendency of ranking children too low. At best, this scale is one of intelligence alone; it does not give any reliable clue to all the other faculties of the mind which enter into wholesome mentality and enable an individual to compete with his fellows in a suitable social environment.

But even using the scale, the results in different localities differ widely as to numbers and percentages. While Dr. Goddard maintains that about 2 per cent of all school children are distinctly feeble-minded, and goes even so far as to believe that many children thought merely backward are really feeble-minded, the figures obtained in New Orleans show that less than 1 per cent are abnormal mentally. And in Raleigh, S.C., only 28 out of 3,800 children were found to be feeble-minded. This would show that we cannot attempt to generalize too readily on the basis of a limited number of testing opportunities, and that conditions may differ very much in different localities.

A great deal has been said recently about the large percentage of feeble-minded among our criminals and prostitutes. While it cannot be disputed that weak-minded persons are very likely to drift into delinquency and moral looseness, and while every reformatory and prison

has its quota of feeble-minded inmates, it must also be conceded that their number is not excessive or even preponderating, and the feeble-minded criminal is certainly not so dangerous to society as the clever one, he who has high intellectual and volitional potentials, but whose career was thwarted in the beginning by misdirection, thru economic and other causes, so that he became anti-social instead of social. Even the percentage of moral imbeciles is not so large that it would swell the ranks of the criminals unduly. Crime has many other causes. Many a criminal, for that matter, is not a genuine imbecile, but merely a primitive man, an atavistic type, perfectly normal under primitive conditions, but unsocial in the higher and more complex social organism of the present day.

Speaking of the causes leading to abnormal development, there has also been too much alarmism and overemphasis of obscure and insufficiently proven data. The part heredity plays has certainly been overstated. Of course, outspoken degeneracy, physical and mental, and positive defects are apt to be transmitted to the offspring. Deaf-mutism, for example, is distinctly hereditary. So are idiocy and imbecility. The hereditary sequence of transmission can easily be traced when we are dealing with a single or a small number of units. Black parents will have black children, and white parents will have white offspring. But when we mix types and multiply units, we are confronted with many possible combinations of transmitted traits which it is difficult to foretell, and the number of which increases in geometric proportion. Even a marriage between black and white, or mulatto and white, allows of quite a number of variations. It has been shown that the number of units transmitted from one human being to another, including physical, emotional, mental, and other traits, must be counted by the thousands. It is, therefore, entirely impossible to state whether a certain mixture of types will produce this or that result, and whether defects in the parents may not be overbalanced by transmitted and accumulated excellences. To say that a criminal father must have a criminal son is preposterous; the son may become a benefactor of mankind.

Delinquent children are only too often victims of circumstances, and many children who give the first impression of feeble-mindedness and anti-social instincts may be saved to useful citizenship. It is too often a matter of unfavorable environment, and lack of opportunity for proper education and training, not to speak of inspiration toward the awakening of mental effort and social instincts.

Even inebriety and venereal diseases, much harm as they have done and are still doing, must not be held responsible for more than their share of influence. After all, if they were so potent an evil as they are represented to be, we should now be a race of imbeciles and criminals. Drunkenness and lues were much more common in the past than now; there were times, not far off, when it was considered a test of valiance to serve Bacchus,

Gambrinus, and Cupido to exhaustion. Our forefathers were heavy drinkers, and no lady even of the royal court would seek her nightly pillow without having had a nightcap of singular strength. And licentiousness was common in the highest places, and in ancient times a kind of prostitution was connected with religious rites. One who studies the history of venereal disease will admit that we have made progress. And, in spite of our tainted heredity, we are after all a virile race, and are following an upward trend.

Seemingly hereditary conditions are often due to imitation in early childhood, and to the workings of similar life conditions. Weakened constitutions in parents, and a transmission of weakened conditions may be overcome in the children by proper attention and treatment—medical, social, and mental.

These remarks must not be construed as if they were intended to discredit the study of eugenics. Eugenics is a most valuable science, young and incomplete as it is, and the time has come when children must make up their minds to select better parents for themselves. Seriously speaking, the warning issued by the eugenists should be heeded everywhere. But we must not be too hasty to crystallize these warnings in the form of laws, which are likely to do more harm than good, if they go farther than to regulate the most obvious things. Our data are still meager, and the collection of data is very difficult, as we have no vital statistics to speak of, and those who try to gather information as to the family history of individuals will find their path beset with almost unsurmountable obstructions, especially when it is desired to obtain scientifically reliable facts about the mental and physical condition of ancestors and relatives. It is for this reason that a great many of the family charts prepared in various places are of doubtful value.

Quoting from my recent article on "Sane Eugenics":

> How little we are justified in making offhand assertions in regard to the effect of physical and neural diseases upon the status or social efficiency of an individual is evident from a study of genius' debt to disease. Genius has often been compared with insanity, and sometimes has been called closely related to feeble-mindedness and mental defect. Nevertheless, if all mankind were of the average animal and neural health so vigorously advocated by some students of eugenics, we should possibly be without some of those wonderful minds who have given to the world the loftiest thoughts, the finest art, and the highest emotional stimulus. Dr. Charles B. Reed comes with the theory that the world is indebted for many of its literary masterpieces to the presence of disease-produced poisons in the author's blood. "We are not prepared at present to insist that toxins are essential to achievement, nor that an obscure toxin will convert mediocrity into genius, but rather to suggest that the presence of such a substance in the circulation may, and does in many instances, accelerate and intensify the expression of existent intellectual tendencies," writes Dr. Reed in the *Forum*. In support of his theory he cites the instances of Macaulay, Gibbon, Lytton, Landor, Milton, Defoe, Heine, J. Addington Symonds, Stevenson, and many others. But it has been shown long ago that the human race would hardly be what it is at present if it had not been for its neurotics. A highly sensitive

nervous organism has certainly its drawbacks for the individual and for his immediate family, but the world at large is the gainer by individual unhappiness and by the sacrifice of individual eugenics.

Broadly speaking, it must be admitted that it is the effect of environmental conditions and influences that has developed the human race from barbarism to civilization. In this process, physical and mental hygiene and education may be called the conscious elements.

Social and economic conditions have been responsible for a vast amount of "exceptional" development of the undesirable order. A study of the causes of retardation of school children must include a study of their home environment and economic standing. A survey of the stockyards district of Chicago has revealed the most astounding facts as to why the children attending school there became retarded and grew up to be failures in life. Miss Jane Addams, of Hull House, has forcibly shown the disastrous effect of economic pressure. Secretary C. Loving Brace, of the New York Children's Aid Society, stated in one of his reports:

> Poor and insufficient food, noise, confusion, excitement day and night, have favored the development, among the young, of St. Vitus' Dance. Poor food, little sleep, and long hours of confining labor are having the deleterious effect to be expected upon the older children.

The number of homeless children is astounding, and any study of the causes of delinquency and dependency of children will convince the student that neglect and maltreatment are only too frequent causes. These are only a few of the most potent factors leading to unfortunate "exceptional" development.

Again, there are racial differences, and the various types of immigrants adapt themselves with different degrees of success to our economic conditions. Our life-conditions are becoming more and more strenuous, and in this struggle for existence the social strata, representing different levels of civilization, are becoming more and more clearly defined, in terms of economic success and social value. Our population, even omitting the immigrant portion, is by no means culturally homogeneous; the "mountain whites," the "white trash," and similar types represent bygone stages of civilization. Those who have kept pace with the rapid advance are relatively at an advantage in the race for success, and the backward types fail in the merciless competition. This naturally affects the children in their endowments for education and in their chances for self-betterment. In these cases, it is not always a problem of the individual, but of generations.

Of the physical causes of retarded and impaired development, much has been said, and it is hardly necessary to go into details. But let us remember that we must observe those danger signals in the development of a child which signify that we must beware. Well-organized systems of medical inspection of school children and of preventive school hygiene will do much to alleviate conditions of this kind.

In fact, school sanitation will relieve much of the strain which now causes so much havoc in the lives of our growing children. It will relate not only to proper lighting, seating, and things of that kind; but even more effectively to programs and courses of study. Many a child goes astray or falls behind because the conditions under which he works are against his own individual nature. It was an interesting step to take when a certain school system introduced "schools for the discontented." Whittier's "Barefoot Boy" ought not to have been written in vain. The truant is not necessarily a bad boy.

The daily program must be adjusted to the fatigue curves of the daily efficiency of a child. The course of study must be more elastic, so as to recognize the measure of human efficiency. There should be less formality and less looking for "average" results or mechanically determined percentages. We must realize that there are different types of mind which require differentiated training and stimuli. The grading of the work must be based upon a clear understanding of the laws of mental development. Psychological tests of the work required in the different classes of the ordinary graded school have revealed the fact that much of the material, many of the tasks required of the children, are entirely unsuited to the stage of intellectual growth to which they are applied. This suggests that we must revise our school standards most thoroly upon the foundation of psychological facts. The individualization of instruction which takes into consideration the different mental and emotional attitudes of the pupils will lead to a rational recognition of an early vocational training and vocational guidance. All in all, we need a humanization of instruction.

A class of children which is even more neglected than handicapped and retarded children is that of exceptionally bright children. And yet they are destined to become the leaders of our race in intellect, in culture, in constructive activity, in commerce, in politics, and in the uplift of civilization generally. As it is, few have the blessing of being understood in their specific needs, and are treated educationally either as if they were like the average, or even as sinners. For repressed or misguided energy and virile impulse will have to find an outlet somewhere and somehow, and if it finds no legitimate task to perform, it will break the bounds and explode in some form. Thus, those who might have become leaders for good may become our criminals, our misleaders, our selfish demagogs. What might have been a power for good, and a blessing to humanity, turns into a power for evil and a curse to the race. We need schools for those who are to be the pioneers of the future, the captains of our nation in the battle for higher culture and civilization.

And in the training of the social instincts which must make for betterment, we must not forget the training in self-control. Splendid examples have been given in a number of educational institutions by the introduction of systems of pupil self-government. This feature deserves much

careful attention. With a proper development of this democratic method of the training of the will and of the social nature of the child, many pitfalls will be avoided into which the untrained mind of our youth is apt to fall. It will give to the growing child a new appreciation of his responsibility; and especially in the adolescent period, when altruistic sentiments arise with particular force, battling, however, with the rising sense of self, of individual rights and privileges, a training in pupil self-government will go far to strengthen the social instinct and to curb the antisocial tendencies

The problem of the exceptional child is the problem of how we may save the frightful human waste which is going on all the time. It is, put in a different way, the problem of failure or success in education.

Says Helen Keller in a recent letter to the writer:

> It is of the utmost importance to give every child the best education of which he is capable. No effort, no money, no sacrifice should be spared. The more severely a child is handicapped, the more precious is whatever equipment is given him for the struggle of life. Let the public once realize how far such children can be helped, and nothing will be left undone to prevent the fearful waste of human minds which lies heavy upon our civilization. This is true conservation—the saving of valuable human faculties from neglect and unskillful teaching.

FIT AND UNFIT MATINGS[1]

C. B. DAVENPORT, CARNEGIE INSTITUTE OF WASHINGTON; DIRECTOR, DEPARTMENT OF EXPERIMENTAL EVOLUTION, COLD SPRING HARBOR, LONG ISLAND, N.Y.

There comes a time in the life of most thoughtful, cultured people when they realize that they are drifting toward marriage and when they stop to consider if the proposed union will lead to healthful, mentally well-endowed offspring. But however much such a person may take advice of books or friends, he will find such a lack of definite knowledge that, shutting his eyes to possible disaster, he decides to take the chances. Were our knowledge of heredity more precisely formulated, there is little doubt that many certainly unfit matings would be prevented and other fit matings, that are avoided thru false scruples, would be happily contracted. I purpose briefly to consider what is the present state of our knowledge of the inheritance of various characteristics.

The limitations in the scope of this article must be made clear at the outset. As a biologist, not a physician, I shall not consider many acquired conditions which render people unfit for marriage. Governments spend scores of thousands of dollars and establish rigid inspections to prevent the spread of the coitus disease of the horse but the spirochete parasite that causes the corresponding disease in man and entails endless misery on hundreds of thousands of innocent children may be disseminated by

[1] Copyrighted, 1910, by C. B. Davenport; published by Henry Holt & Co.

anybody, and is being disseminated by scores of thousands of persons in this country, unchecked, under the protection of the "personal liberty" flag. Alas! that so little thought is had to the loss of liberty of the infected children. Marriage of persons with venereal disease is not only unfit; it is a hideous and dastardly crime; and its frequency would justify a medical test of all males before marriage, innocent as well as guilty. Fortunately there exists for syphilis, at any rate, a test so simple that there can be no more objection to it on any sentimental ground than to vaccination.

Nor do I propose to consider in any detail the effects of drugs on germ-plasm. The matter awaits further investigation. Meanwhile experience indicates that the marriage of alcoholists certainly, and probably users of any drug to extremes, is associated with defective development of offspring and is, in so far, unfit. Also the class of cases in which, as in tuberculosis, a weakened person is quickly finished by the drain of reproductive processes bears on marriage fitness but does not belong to my topic in the narrow limits I assign it. For my topic deals rather with the result of union of two uninfected germ-plasms with their inherent peculiarities.

Under these limitations, then, I may say that recent developments in the study of heredity, commonly associated with the name of Mendel, enable us to formulate more precisely than hitherto the working of heredity. Three fundamental principles are to be kept clearly in mind. The principle of independent unit characters, the principle of the determiner in the germ-plasm, and the principle of segregation of determiners.

The principle of independent unit characters states that the qualities or characteristics of organisms are, or may be analyzed into, distinct units that are inherited independently. It follows that the characters of a parent or a particular relative are not inherited as a whole but each individual is a mosaic of characters that appear in a variety of relatives.

The principle of the determiner in the germ-plasm states that each unit character is represented in the germ by a molecule or associated groups of molecules called a determiner. These determiners are transmitted in the germ-plasm and are the only things that are truly inherited. It is a corollary of the theory of inheritance from the determiner that we do not inherit from our parents, grandparents, or collaterals, but related individuals have some common characteristics because developed out of the same germ-plasm with the same determiners. A child resembles his father because he and his father are developed from the same stuff. Both are chips from the same old block. In relation to determiners some characteristics are positive, depending directly upon them; while others are negative and depend upon the absence of a determiner. Thus a brown eye depends on an enzyme that produces the sepia-colored pigment, while a blue eye depends upon the absence of such an enzyme. It is not always easy to anticipate whether a given characteristic is positive or negative. For instance, long hair, as in angora cats, sheep, or guinea-pigs, is apparently not due to a

factor added to short hair but rather to the absence of a determiner that stops growth in short-haired animals.

The principle of segregation of determiners in the germ-plasm states that characteristics do not blend; that if one parent has a characteristic while the other lacks it, then the offspring get a determiner from one side only instead of from both sides and when the germ-cells are formed in such offspring half of them have the determiner and half of them lack it. There is thus a segregation of presence and of absence of the determiner in the germ-cells of the mixed offspring. The characteristic in the offspring that is due to a single (instead of the normal double) determiner is called a simplex characteristic. Such a characteristic is frequently distinguishable from one that is due to the double determiner by its imperfect development. Thus the offspring of a pure black-eyed and a blue-eyed parent will have brown eyes.

It is a corollary of the foregoing that if the individual with a simplex character be mated to one lacking the character, half of the offspring will lack the determiner and half will be simplex, again, in respect to the character. If in both parents the character is simplex, then two like determiners will meet in one-fourth of the unions of egg and sperm, the two will both be absent in one-fourth of the unions, and one only will occur in half of the unions—such will be simplex again. If one parent have the characteristic simplex and the other duplex, then half of the offspring will have it simplex and half duplex.

Starting with the principles just enunciated, we reach at once the most important generalization of the modern science of heredity: *When a determiner of a characteristic is absent from the germ-plasm of both parents (as proved by its absence from their bodies) it will be absent in all of their offspring.* In order to predict the result of a particular mating it is necessary, first, to know what similar unit characteristics both the parents lack, what they both possess, and in which characters they differ, and, secondly, to know for each characteristic whether it is due to the presence of a determiner or to its absence. This can, in part, be determined experimentally or inferred from pedigrees. Nevertheless our knowledge of determiners progresses slowly; for here, as in other branches of science, nature's secrets have to be forced from her.

To illustrate the precision with which the characteristics of offspring may be predicted in the best-studied cases, I may refer to eye color. Blue eyes are due to the absence of brown pigment. If there is a determiner for brown iris pigment in the germ-plasm it will produce such pigment in the body that arises from that germ-plasm. The absence of iris pigment is proof of the absence of the pigment determiner from the germ-plasm. If both parents lack brown pigment their offspring, being devoid of the determiner for brown pigment, will all lack brown pigment. As a matter of experience two parents both with pure blue eyes will have only blue-

eyed offspring. Similarly, if the hair of the parents be flaxen, that is evidence of the absence of a hair-pigment determiner in their germ-plasm. In the united germ-plasms of two flaxen-haired parents there is no determiner for hair pigment and all children will have flaxen hair. This agrees, again, with experience. For the same reason parents both lacking curliness or waviness of hair will typically have only straight-haired children.

Hair and eye color are characteristics which serve well to illustrate the precision of the modern science of heredity, but they are ordinarily considered to be immaterial to well-being. But if it is true, as Major C. E. Woodruff maintains, that pigmentation protects individuals from the injurious effects of the tropical sun's rays, then one may say that the marriage of two blue-eyed persons in the tropics would be an unfit marriage. On the other hand, the marriage of the blond with a brunette would be fit, for the darker consort would bring into the combination the determiner for pigment and insure a dark progeny. In the tropics, then, the marriage of light with dark or of two dark persons is, by hypothesis, a fit mating, while that of two blonds is unfit.

We may now extend the study of the method of inheritance to cases of abnormalities and diseases, and we shall see that just as it is hard to draw the line between these two sorts of characteristics so they show no difference in their general method of inheritance.

A typical example of an abnormality is that of brachydactyly or short-fingeredness, a condition in which each digit comprises only two phalanges —the fingers are all thumbs. This result seems to be due to an inhibition of the normal growth process. An abnormal person married even to a normal will beget 100 per cent or 50 per cent abnormal, according to circumstances, and such a marriage is unfit; but two parents who, tho derived from brachydactyl strains, altogether lack the inhibitor of growth will have only normal children, for normality implies entire absences of the determiner that stops the growth of the fingers. Such a union is entirely fit.

The rule that the abnormal condition is induced by something, so that normal parents never produce abnormal offspring, holds for many abnormal conditions such as presenile cataract; the congenital thickening of the skin known as keratosis; xanthoma, in which the skin acquires yellow patches; hypotrichosis congenita familiaris, or early absence of hair, and other abnormal conditions of skin and hair whose inheritance has been analyzed by Gossage. Probably the same is true of diabetes insipidus and stationary night blindness, according to Nettleship. In all these cases the intermarriage of normal descendants, even of abnormal ancestry, is entirely fit; but abnormals will reproduce their peculiar condition.

In another class of cases the abnormal or diseased condition is due to the absence of a characteristic or quality. Thus albinism is due to the absence of pigment and two albino parents have only albino children. Normal offspring of an albino and a pigmented parent may transmit the

albinic condition; and the marriage of a pigmented male of an albinic strain with the pigmented female of another albinic strain or with a pigmented cousin is unfit.

Deaf-mutism is due to a great variety of causes; any one of a variety of defects may produce it. But in different individuals of the same family the chance is large that it is due to the same defect. This defect is frequently recessive, hidden in the normal children. Two such normal children who are cousins and from deaf-mute stock tend to have one-quarter of their offspring deaf-mutes. The proportion of congenitally deaf offspring is thrice as great among cousin-marriages as among others. The conclusion of Fay, based on extensive statistics, deserves to be widely known:

> Under all circumstances it is exceedingly dangerous for a deaf person to marry a blood relative, no matter whether the relative is deaf or hearing, nor whether the deafness of either or both or neither of the partners is congenital, nor whether either or both or neither have other deaf relatives besides the other partner.

Such a marriage has proved to be unfit.

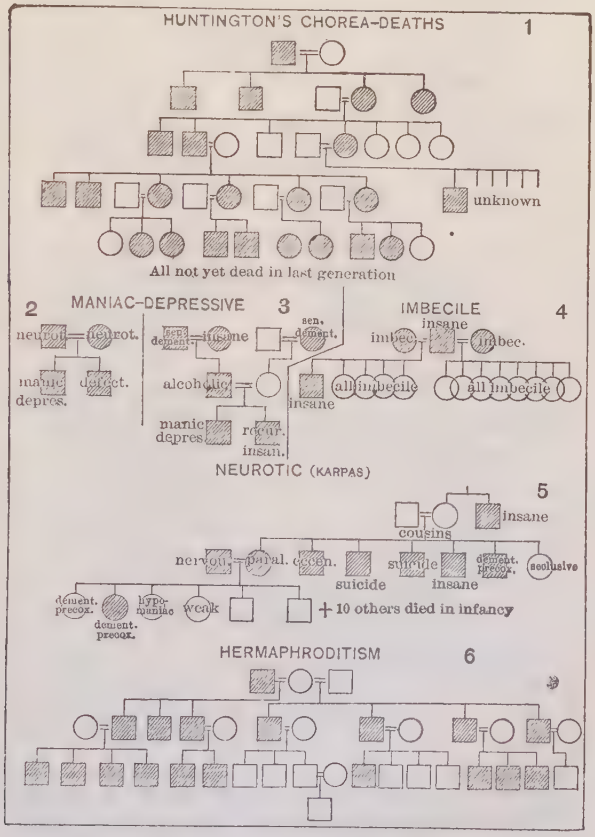
Passing next to the group of mental diseases, we find several forms which seem to be due to the absence of some simple unit, so that when both parents exhibit the abnormality all of the children do likewise. As a first case may be taken imbecility.

That imbecility is due to the absence of some definite simple factor is indicated by the simplicity of its method of inheritance. Two imbecile parents, whether related or not, have only imbecile offspring. Barr gives us such data as the following from his experience. A feeble-minded man of 38 has a delicate wife who in 20 years has borne him 19 defective children. A feeble-minded epileptic mother and an irresponsible father have 7 idiotic and imbecile children. The L family numbers 7 persons, both parents and all 5 children imbecile. Among the "Family Records" I have been collecting, there occurs the R family where A (insane) marries in succession two mentally weak wives and has 13 children, all mentally weak (A 4). In a case described by Bennett, a defective father and imbecile mother have 7 children all more or less mentally and morally defective. There is, so far as I am aware, no case on record where two imbecile parents have produced a normal child. So definite and certain is the result of the marriage of two imbeciles, and so disastrous is reproduction by an imbecile under any conditions, that it is a disgrace of the first magnitude that thousands of children are annually born in this country of imbecile parents to replace and probably more than replace the deaths in the army of about 150,000 mental defectives which this country supports. The country owes it to itself as a matter of self-preservation that every imbecile of reproductive age should be held in such restraint that reproduction is out of the question. If this proves to be impracticable then sterilization is necessary —where the life of the state is threatened extreme measures may and must be taken.

Maniac-depressive insanity seems likewise due to a defect, in any case it is especially apt to occur in families in which both parental strains show the disease. I give a few cases (A 2, A 3).

While, on account of the complexity of nervous diseases, all of the children even of two neurotic parents are not always neurotic, the chances of this result are much increased when the parents are related. This is

A



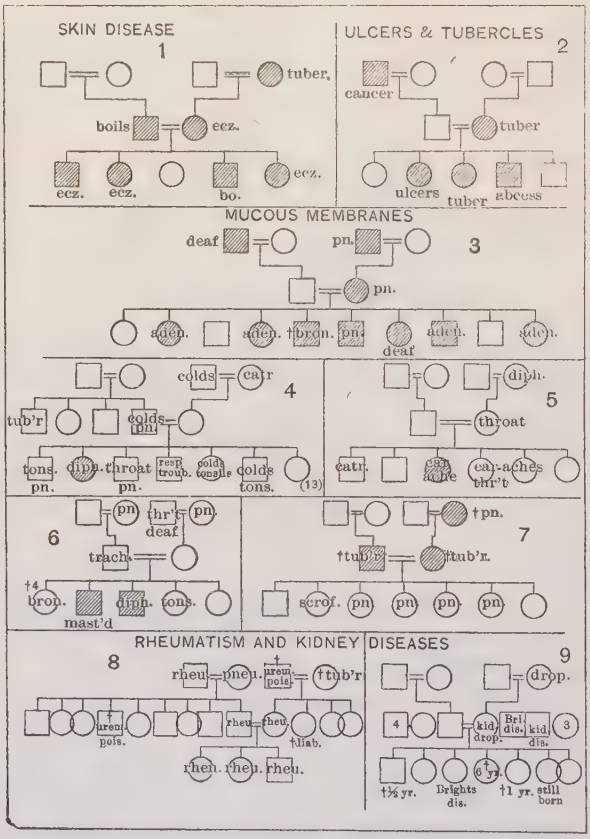
Squares, males; circles, females; shaded, affected.

illustrated by the family described by Karpas. Here all children are nervously defective (A 5).

The case of partial hermaphroditism is peculiar because it affects usually only the male sex. The inhibitor of complete sex differentiation seems to be dominant in the male—the embryologically more advanced sex—tho it may fail to activate in, and is indeed irrelevant to, the female sex. Since the abnormality is necessarily revealed only by the male sex, the

condition of the female is no test of her germ-plasm in respect to this characteristic. As a matter of fact the normal mother may easily represent the defective strain. A normal male belonging to the defective strain is usually without trace of the inhibitor, yet a few cases are known of an apparently normal person with an inactive "inhibitor" having, by a normal consort,

B



Squares, males; circles, females; shaded or lettered, liable to given disease. *aden.*, adenoids; *bo.*, boils; *Bri. dis.*, Bright's disease; *catr.*, catarrh; *diab.*, diabetes; *drop.*, dropsy; *mast'd*, mastoiditis; *pn.* or *pneu.*, pneumonia; *rheu.*, rheumatism; *trach.*, trachitis; *tub'r*, tuberculosis. (13), age.

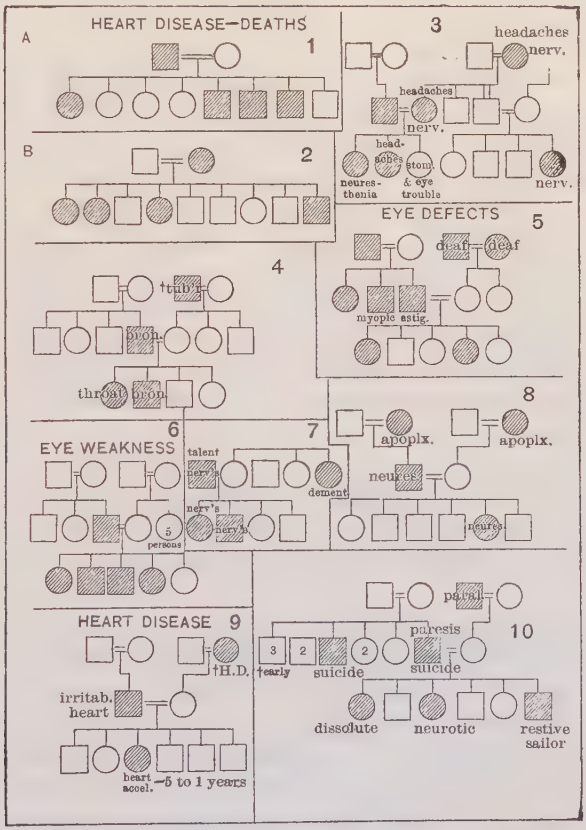
some abnormal sons. But, in general, the marriage of females belonging to hermaphrodite (hypospadic) strains is unfit, while normal males of such strains may marry females from normal strains (A 6).

The case of Huntington's chorea is a striking one of inheritance of disease. This is a form of chorea that leads to dementia and death. A. S. Hamilton has worked up the pedigree of many cases. The mating of two

parents with chorea is obviously highly unfit and should not be permitted (A 1).

Let us now consider the hereditary behavior of some of the commoner diseases, including those which, while not fatal or apt to incapacitate a person, nevertheless interfere much with his happiness. Knowledge in

C



Squares, males; circles, females; shaded, affected. Figures in circles indicate number of normals. *Astig.*, astigmatism; *bron.*, bronchitis; H. D., heart disease; *nerv.*, nervous.

this field is less precise, altho the general teaching is not less clear. As a source of information I rely chiefly on the records of health and other characteristics furnished for over two hundred families by members of the families concerned. These are largely representatives of professional circles, but include also farmers and people in commercial life.

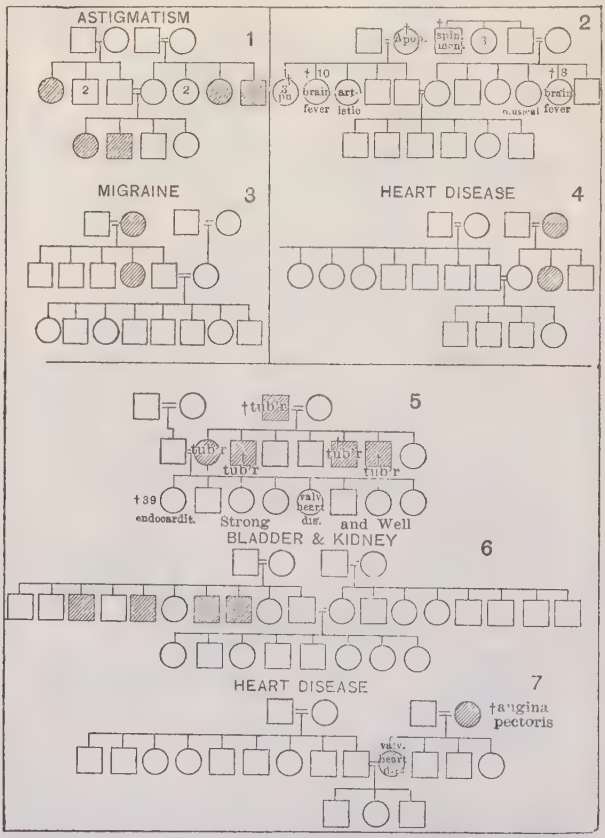
In the pedigrees that follow nothing is more evident than that usually specific diseases are not inherited but only a condition of liability or

non-resistance to a particular class of disease. Often an entire organ-complex is thus non-resistant.

A good example of inheritance of general weakness in an organ is sometimes found in the case of the mucous membranes.

In the N family the principal diseases to which there is a liability are located in the mucous membranes of the nose, throat, ear, and bronchia (B 3).

D



Squares, males; circles, females; shaded, affected. Figures *in* circles indicate 2 or 3 normals; † 3, † 8, † 39, age at death. *Apop.*, apoplexy; *tub'r*, tuberculosis.

In the D family the center of susceptibility is more specific, being nearly confined to the nose and throat (B 4).

In the E family the center of weakness is the ear (B 5).

In the N family the trouble seems to spread from the throat (B 6).

In the M family the susceptibility is more nearly confined to the lungs (B 7).

In another family the skin seems to be the weak organ; boils and eczema are common (B 1). In still another, tubercles and abscesses seem to be associated (B 2).

In other families the kidneys will be the seat of incidence. In one it will take the form of Bright's disease and dropsy (B 9); in another uremic poisoning and "rheumatism" (B 8).

Heart disease is a very general term; there is no doubt about its inheritance, altho the precise nature of the weakness is varied (C 1, C 2).

Nervous disease reappears as paralysis, neurasthenia, nervousness, headaches, and stomach trouble, and migraine appears in successive generations (C 3, C 10; D 2).

Looking over these pedigrees, one is impressed by the fact, first, that the incidence of diseases is not haphazard nor, in any large family, do the various causes of death occur in the proportions given in the census tables for the population as a whole. Tuberculosis of the lungs is the cause of more than 10 per cent of the deaths in the United States, but it would not be difficult to pick out of my collection ten families comprising about one hundred deceased persons, among whom, instead of the expected ten, not one died of consumption. Similarly there are many families in which no nervous disease has occurred in three generations; others without kidney diseases, and so on. On the other hand, in other families 40 to 50 per cent or even 80 per cent are attacked by lung and throat troubles or nervous defects. These differences cannot be attributed chiefly to environment, because they occur in families of which the members are widely dispersed and have varied occupations. They indicate fundamental differences in the protoplasm.

But, it may properly be urged, how about environment? Are not many of these examples of occurrence of disease in one family due to infection or to similar untoward conditions? I do not doubt that they all are. The controversy between heredity versus environment has no good basis and it is fallacious to emphasize the distinction. As well might one ask whether poor seed or poor climate is the more important in determining poor crops; both are important. Nevertheless, emphasis must be laid on the fact that while poor climate brings heavy losses, there are strains that you can hardly kill by frost, nor by drought, nor by poor soil, nor by the wilt parasite—there is such a thing as resistance in the blood as well as, on the other hand, susceptibility of particular organisms to poor environment or to infection. Unfavorable environment collects its toll first from those who are, by heredity, least resistant.

Granting the fundamental fact of the diversity in resistance or liability to disease of the different protoplasms, it remains to be considered how these facts are to be applied in selecting consorts so as to secure healthy children.

In some cases at least definite rules may be laid down. The fundamental law is, as already stated: Whenever the same unit defect exists in

both parental protoplasms it will appear in all the offspring. The "unit defect" is not, as already pointed out, easily determined, nor is a given gross defect probably identical in the parental strains unless the parents are cousins. Despite these difficulties in its application, the rule holds, by and large, as a valuable first approximation.

Of unit defects the weakness of mucous membranes seems to be a good illustration. If both parents are subject to colds, catarrh, bronchitis, asthma, or lung-tuberculosis, all or nearly all of the children are liable to these diseases. The same is true in some forms of nervous disease and rheumatism. If the disease fails to appear in any child it is probably because the child died too early, or is still very young, or has been able thru exceptionally favorable environment to avoid the incidence of the disease or, by strengthening other means of defense, to hold it down or eliminate it, even after attack. The expectation that is usually realized, however, is that all shall show a weakness to the same disease as their parents.

If liability to the disease is found in the protoplasm of both parental strains but is shown in the soma of one only of the parents, then it will probably occur in one-half of the offspring. Examples are found in the families whose pedigrees are given in the diagrams (C 5, B 3, C 4, C 7, C 10, C 8, C 9). The total of the last generation in these examples gives 18 subject to the specific disease and 23 non-subject, where $20\frac{1}{2}$ and $20\frac{1}{2}$ are the expectation. The excess of the non-subject may be explained on the same ground as the exceptions to complete incidence of disease referred to in the preceding paragraph.

If both parents belong to strains having the same unit defect, even tho they have it not themselves, we may expect either that one-quarter or none of the children will have the defect, depending on earlier ancestry. This rule is illustrated in some of my cases (D 1, D 3).

If one parent belongs to a strain with a unit defect while the other strain is without the defect, then the children will be without the defect. This is illustrated by many examples (D 2, D 4, D 5, D 6, D 7).

To the rule that a strong characteristic from one strain may overcome the defects of a weak characteristic from the other strain there are some apparent exceptions, due chiefly to the fact that the simplex condition is rarely quite as strong as the purely positive condition, so that defects are not wholly overcome, and to the fact that the supposed pure positive strain may contain a hidden defect and be really only simplex.

Recognizing these limitations in our knowledge, which it is believed further accumulation and study of data will overcome, how far can we go in advising, in the case of the commoner heredity diseases, what matings are and what are not conducive to healthy offspring?

The foregoing considerations indicate: If (*a*) the negative character is, as in polydactylism and night blindness, the normal character, then normals should marry normals and they may even be cousins. (*b*) If the negative

character is abnormal, as in imbecility and liability to respiratory diseases, then the marriage of two abnormals means probably all children abnormal; the marriage of two normals from defective strains means about one-quarter of the children abnormal, but the marriage of a normal of the defective strain with one of a normal strain will probably lead to strong children. The worst possible marriage in this class of cases is that of cousins from the defective strain, especially if one or both have the defect. In a word, the consanguineous marriage of persons, one or both of whom have the same undesirable defect, is highly unfit, and the marriage of even unrelated persons who both belong to strains containing the same undesirable defect is unfit. Weakness in any characteristic must be mated with strength in that characteristic; and strength may be mated with weakness.

DEPARTMENT OF SCHOOL PATRONS

SECRETARY'S MINUTES

OFFICERS

President—Mrs. William S. Hefferan, National Congress of Mothers.....Chicago, Ill.
Vice-President—Mrs. L. L. Blankenberg, General Federation of Women's Clubs
Philadelphia, Pa.
Secretary—Mrs. Louis Hertz, Council of Jewish Women.....San Francisco, Cal.

FIRST SESSION—Wednesday Afternoon, July 9, 1913

Joint Session with the Department of School Administration

L. R. Alderman, superintendent of city schools, Portland, Ore., gave a paper on "Co-operation of Home and School."

SECOND SESSION—Thursday Forenoon, July 10, 1913

The department convened at 9:00 A.M with President Hefferan in the chair. After morning greetings had been extended by the president, the financial statement of the department was read by the secretary *pro tempore*, Blanche P. Taylor.

Mrs. W. S. Hefferan, National Congress of Mothers, Chicago, Ill., then gave the "Summary of Reports of the State Joint Committees and Affiliated Organizations, 1912–13."

Mary Elizabeth Bates, M.D., Denver, Colo., gave the "Report of the Committee on School Health."

P. P. Claxton, United States commissioner of education, Washington, D.C., presented a paper on "The Responsibility of the Community to the Rural School."

"Citizen Co-operation with the Schools" was discussed by C. E. Beach, superintendent of city schools, Olympia, Wash.

Discussion: William B. Owen, principal, Chicago Normal School, Chicago, Ill.; and W. A. McKeever, Kansas State Agricultural College, Manhattan, Kans.

At this point Commissioner Claxton supplemented his previous address by outlining his plan for establishing a Division of Home Education within the Bureau of Education, and extended to the Department of School Patrons an invitation to co-operate with the Bureau of Education and also to contribute suggestions to aid in making the new division of service to all.

The session was closed by Anna I. Jenkins, state chairman of kindergartens, California Congress of Mothers, Pasadena, Cal., who spoke, by request, upon the way woman's suffrage is progressing in California and especially of the methods employed in working for the passage of measures during the recent session of the legislature. Among the measures passed at the legislative session was one assuring state recognition of kindergartens. The act requires the compulsory establishment of kindergartens upon the petition of twenty-five patrons. Another provision was one making holders of kindergarten certificates eligible to teach in the first grade.

A luncheon at the University Club followed the second session of the department. Among the speakers at the luncheon were: W. A. McKeever, Kansas State Agricultural College, Manhattan, Kans.; Lee F. Hanmer, director, Division of Recreation, Russell

Sage Foundation, New York, N.Y.; Mrs. O. Shepard Barnum, California State Board of Education, Los Angeles, Cal.; and Mrs. W. S. Hefferan, National Congress of Mothers, Chicago, Ill.

BLANCHE P. TAYLOR, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

SUMMARY OF REPORTS OF STATE JOINT COMMITTEES AND AFFILIATED ORGANIZATIONS, 1912–13

The object of the Department of School Patrons is fourfold:

First, to ascertain from highest educational authorities the needs of the schools and approved methods of meeting them.

Second, to transmit this educational message systematically to strong volunteer organizations, national and state and local, which can do tremendous good by such directed and united effort.

Third, to provide a simple means of giving unity and continuity to state work thru its state joint committees, which comprise one state member for each affiliated organization and members-at-large representing strong state or local associations.

Fourth, to collect in convenient form, for mutual suggestion and encouragement, brief statements of co-operative work accomplished or under way. Most important undertakings require the concerted effort of the entire community. When it was possible to segregate the work of individual organizations from general results in accordance with reports sent in, specific credit has been given.

The distinctive function of the Department of School Patrons, and the state joint committees, thru which it works, is not so much to undertake independent work as it is to focus volunteer efforts on the point of greatest need; to help all to do one thing thru several years until results are actually attained.

Two committees in the Department of School Patrons work along very vital lines; these are the School Health and the School Revenue committees.

The School Health Committee believes that the highest efficiency in our public schools can be attained only when the health of pupils and teachers is kept at its maximum. "School health" involves the physical, mental, and moral welfare of pupils and instructors, and the hygienic school and home conditions essential to its preservation.

"It is all very well to talk about training the mind, but no one has ever yet seen a mind that was not connected with a body." The School Health Committee will endeavor to promote popular knowledge of personal and school hygiene and the adoption of laws for medical inspection. The School Health Committee of last year—Mrs. Maggie Barry, chairman—offered at the National Education Association meeting in Chicago the following resolution which was adopted:

WHEREAS, Our Department of School Patrons has been working for personal and sex hygiene in all normal schools; therefore be it

Resolved, That we request the National Education Association to appoint a committee of experts to outline an adequate normal course on this subject.

This resolution was brought before the Council at the meeting of the Department of Superintendence in Philadelphia in February and sent to the National Education Association in the following form:

Resolved, That the Council recommends to the National Education Association the appointment of a committee to devise ways and means by which the subject of sex hygiene shall be fitted into the curriculum of the normal schools, in order to equip teachers for a wise later treatment of the problem in the grades.

President Fairchild appointed the following committee:

William B. Owen, principal, Chicago Normal School, Chicago, Ill.
Jessie Phelps, Ypsilanti Normal School, Ypsilanti, Mich.
Thomas M. Balliet, New York University, New York, N.Y.
Z. X. Snyder, president, State Teachers College, Greeley, Colo.
W. H. Burnham, Clark University, Worcester, Mass.
M. V. Barry, North Texas College, Sherman, Tex.
Helen M. Hefferan, National Congress of Mothers, Chicago, Ill.

Some very definite results from the work of this committee may be expected in the report to be given at the next session of this department.

The department sent out two circular letters this year to the state joint committees, the first containing this word from President Fairchild:

The most pressing educational problem today is the betterment of the rural schools. The progress in the last decade in universities, colleges, high schools, and city systems of graded schools has been phenomenal; the increase in enrollment in these classes of schools has reached more than 100 per cent. The whole nation is aware of these educational agencies. The one weak spot in our system, however, is that of the rural school. Here, no such progress can be noted. The lack of trained teachers, of adequate supplies, of reasonably good buildings, the shortness of terms, and the low state of public opinion are largely responsible for the want of advancement in our rural schools. More than half of the twenty-five million boys and girls in America attend rural schools. Of this magnificent army of some fourteen million boys and girls, less than 25 per cent is completing the work of the grades. Something must be done to better these conditions.

The next meeting of the National Education Association will have as its major theme "The Betterment of the Rural Schools."

On the general program, messages from people who are in genuine sympathy with the rural schools and ardently desire their betterment will be given. In every department some part of the program will be dedicated to this great problem. It is hoped that the whole American public shall be brought to a realization of the great needs of the boys and girls in the country.

In addition to this an interesting circular—a message from Dr. Claxton on the rural school—was sent out by the department, with the definite purpose of interesting school patrons in rural-school improvement.

Mary Elizabeth Bates, chairman of the School Health Committee, issued an interesting and helpful brochure urging medical inspection in the schools.

The attention of the school patrons was called to the latest publication of the Sage Foundation, called *A Comparative Study of the Public-School Systems in Forty-eight States*. This gives suggestions to each chairman as to how and where his state stands in educational efficiency.

One of the crying needs educationally today is to interest the public in the question of school revenue to the end that more money may be raised for educational purposes. The country at large is demanding an adjustment of her school system to meet changed conditions. "Train the child in character, in responsibility, in initiative vocationally" is the slogan of the business men in their attacks upon the educational product of our schools. Do they know that to teach children to read, write, and cipher can be done with comparatively little cost, but to give vocational training, to supply the equipment for industrial training, requires money and a trained class of teachers? Do they know their viewpoint must be radically changed as to taxes?

A railroad will spend millions developing a section of country; the International Harvester will spend millions developing agriculture; the Consolidated will spend millions developing mines, and it is never considered a tax. It is an investment and is given without a grudge. Have business men studied what they want and what they must pay for? New demands in education mean a higher grade of educator. Do those who are demanding much from our schools realize that they, as business men, will pay a woman of ability twice the salary to conduct their business affairs that they will pay her to train their boys and girls? We need an awakened conscience on the subject of more revenue for the schools that we may have better teachers, equipment, and buildings. The School Revenue Committee of this department is working toward that end.

It is impossible to incorporate in this report the summaries of all the reports received. The necessary omissions are regretted. I have selected types of work in the several states herein reported.

Alabama.—At a meeting of the Alabama Joint Committee the following plan of action was adopted:

1. That the State Joint Committee should not lessen its strength by choosing a new line of work each year but that it should fire along the same line year in and year out until the laws desired are on the statute books.

2. That a state-wide public-sentiment campaign should precede any appeal to the legislature.

3. That in this campaign compulsory education and local taxation should be taken up before the effort to secure a dormitory for women at the state university.

4. That this campaign be conducted thru the newspapers, by correspondence, and, if possible, thru the moving-picture shows.

5. That all newspaper articles be aimed at the ordinary reading public and that the campaign in general be directed at the average citizen.

The committee sent out a very strong series of articles on compulsory education and will follow these with a series with the original charts on

local taxation. Certain facts from these two series will be put into tabulated form so that posters may be placed in public buildings thruout the state. The Alabama School Improvement Association has sent out *Suggestive Outlines for Equipment and Methods of Teaching Cooking, Sewing, and Manual Training in the Rural Schools.*

This association has also instituted a series of health and hygiene lectures in connection with the Birmingham public schools. These lectures are given for the benefit of mothers, by physicians who are experts in their line.

Georgia.—The Joint Committee worked for vocational training and standardizing rural schools.

Pennsylvania.—The committee worked for school revenue; some practical ways of helping the rural schools; the carrying-on of a propaganda for improvement in the physical conditions that surround childhood both in the school and in the home; raising the standard of teachers' qualifications and offering better compensation to teachers for efficient work. There are many parent-teacher associations actively co-operating with the schools of Pennsylvania; these were organized thru the Congress of Mothers.

Kentucky.—The Joint Committee co-operated with the state health department in conducting a general campaign of education along health lines and have, thru the federated clubs, seen that the "extension" work of the state university carried lecturers on the subject, and that they also had a place in the teachers' institute programs; this work was carried into the rural schools by the superintendent of school improvement leagues, who also organized tomato clubs for the girls of the country and corn clubs for the boys. Parent-teacher clubs were extended largely in the city schools.

Michigan.—The Joint Committee in Michigan worked vigorously for a commission school board.

The committee worked for better health conditions in the schools for backward children and for industrial and vocational training in the schools. It worked for better school laws and for higher salaries and pensions for teachers.

The committee interested itself specifically in public-school legislation and was practically responsible for the law which provides means whereby children of indigent parents within school age may attend school—the Board of Education paying, during the school year, to the family of such a child, a sum not to exceed three dollars a week. Opposition to state uniformity in textbooks, but support of free textbooks.

Illinois.—The Joint Committee in Illinois devoted its efforts toward the passage of a vocational education bill and to an increased state appropriation for educational purposes.

Maine.—The federated women's clubs have been active in aid of the passage of the Maine Teachers' Pension Bill, by which provision is made to pay $250 annually to teachers who reach the age of sixty years and have taught thirty-five years. The State Joint Committee has worked

for appropriations for vocational training. Thru co-operative effort nearly $3,000,000 was appropriated by the legislature for common schools this year: $7,000 of this was for teachers' institutes and summer schools; $46,000 for unorganized townships; $120,000 for school supervision in towns; $80,000 for special aid in poorer towns; $80,000 for encouraging industrial education; and $250,000 for free high schools. A campaign was also carried on for better health conditions in the schools.

Massachusetts.—The Mothers' Congress has established many new parent-teacher associations in connection with the schools and many schools have been opened as civic and social centers.

Utah.—The State Federation of Women's Clubs concerned themselves with two acts:

One to raise the tax rate of cities of the second class so that, if they desire, there may be funds for public high schools. This became a law.

The second effort was to secure an appropriation of $50,000 for a girls' dormitory at the state university. Altho women worked hard for this, it failed to become a law.

At the request of School Patrons' Committee an unofficial school board entirely of women was chosen by city clubs. This board will serve as a training school for future service, in case women are ever elected to school boards in Salt Lake City.

The ten members have visited the grade schools during the year and are planning a campaign to secure night schools and schools as social centers. Two trained nurses are working under the direction of the board of health, and inspection of children in the grades is made to combat contagious diseases.

Wisconsin.—The Mothers' Congress is planning the formation of parent-teacher associations in thirty counties, emphasizing improvement of rural schools.

Texas.—The committee has continued its campaign for compulsory education, and for a special state maintenance tax for the University, the Agricultural and Mechanical College, and the Girls' College of Industrial Arts. A more comprehensive child-labor bill has had our support as has also the establishment of a child-welfare commission.

For school hygiene, besides activity for state regulation of the construction of school buildings, information has been received from all parts of the state reporting the installation of sanitary drinking-fountains and the exercise of greater care of the drinking-water.

Personal hygiene has been emphasized thru illustrated lectures to school children, as well as to patrons. A few subjects were:

The importance of good teeth and their relation to physical and mental soundness.
The effect of defective vision upon the nerves and digestion.
Adenoids and their relation to school work.
Food for the growing child.
The lunch basket.

In several towns a beginning has been made for dental and general physical examination of school children, and the educational campaign against the use of tobacco by boys has been continued thruout the state.

In San Antonio a few dentists at their own personal expense procured a moving-picture reel to be used in public schools and in several moving-picture shows to set forth the vital importance of sound teeth and their relation to health. Complimentary tickets will be issued to public-school children, and each child attending is to receive a toothbrush and a tube of tooth paste.

San Antonio School Board has established retarded rooms, with special teachers, in ten school districts. Results have been so gratifying that other rooms will follow.

The women's organizations have continued their interest in the kindergarten by establishment of kindergartens and providing scholarships in kindergarten training schools.

The scholarships in other educational institutions have also been continued.

This committee carefully distributed a large number of reprints from the *Proceedings* of the San Francisco meeting of the National Education Association. Letters received prove that the pamphlets are bringing results. We shall move steadily forward and upward and tho the ascent may be slow, Texas must and will rise until her educational advancement equals her commercial growth and the extent and wealth of her domain.

California.—The California State Committee of School Patrons has specialized on support of a bill before the legislature creating a new state board of education. The bill, as passed and signed by the governor, provides for a board of seven members, none of whom shall during his term of office hold any salaried educational position. The board will appoint three assistant superintendents, one to be commissioner of elementary schools, one, commissioner of secondary schools, and one, commissioner of industrial and vocational education.

A kindergarten bill, introduced in the legislature thru the efforts of the Congress of Mothers, was indorsed. The bill provides that upon petition of the parents or guardians of twenty-five children between the ages of four and one-half, and six years, in any school district, a kindergarten may be established.

This committee has urged the governor to appoint at least two women upon the new state board of education.

School health: Women's clubs are urging the teaching of sex hygiene in the public schools, and commend the introduction of this subject as part of the curriculum in the state normal schools.

Health inspection of public schools is established in the larger cities, and the movement is growing.

Mothers' clubs, collegiate alumnae, and other organizations have co-operated with school authorities in maintaining dental clinics for the benefit of school children.

School revenue: California stands high in the roll of states in the matter of school revenue. Women's organizations have supported teachers' pension bills at past sessions of the legislature, and at the session just closed a bill providing for a flat pension of $500 was passed.

Community co-operation: Congress of Mothers reports 250 active parent-teacher associations, fifty-five of which have been organized during the year. Some of these are called mothers' clubs, because a majority of the members are the mothers of school children.

During the year many of these associations—almost every one of them —have aided school departments in a material way by providing pianos, victrolas, works of art, playground equipment, etc.

In some places, notably in Los Angeles and Berkeley, they have co-operated with school authorities in maintaining headquarters for the care and treatment of children's teeth.

The California Congress of Mothers aims to have a mothers' circle in connection with every kindergarten and elementary school, whose chief object shall be to study the physical, mental, and moral nature of children and to secure in this the aid and co-operation of the teachers.

Representatives of women's clubs assisted in arrangements for the San Francisco Junior Exposition. The secretary of the School Patrons Committee was vice-president of the general committee of this most successful display of educational work.

School extension: The Council of Jewish Women has been instrumental in the establishment of night schools for adults in the Russian colony, and, under the direction of Mrs. Louis Hertz, has placed a large number of copies of the *Oath of the Athenian Youth* in public schools. Vocational training is receiving a strong impetus in the schools of the larger cities, and the establishment of centers for such training in the public schools has received the strong indorsement of this committee, and the organizations it represents.

REPORT OF THE COMMITTEE ON SCHOOL HEALTH

MARY ELIZABETH BATES, M.D., DENVER, COLO., CHAIRMAN

The scope of school hygiene, or school health, is so tremendous, its field so comprehensive, that it would be impossible in this report to define its limits or even to enumerate its inclusions.

Not discouraging effort in any of its phases, but encouraging our members to lend a hand whenever the opportunity presents, the committee has thought it wise to direct its main work along the line of greatest need, that which, happily, gives the most striking benefits in the present and

offers the greatest promise for the future. I refer, of course, to the mandatory examination and care of public-school children, medical inspection, and correction of physical defectiveness, as usually termed.

I regret that it will not be possible to present in full the reports received from the state chairmen of this committee. Naturally some are more encouraging than others, but they show that women are growing yearly more alive to their responsibilities and their opportunities, to their privileges and their rights; that everywhere women are learning lessons and teaching lessons in health, our most valuable asset in work and play, in rest and in pleasure, in food and drink and shelter, in love and life and happiness and that everything pertaining thereunto is inextricably interwoven with woman's most sacred obligations and belongs, therefore, to her sphere as woman.

Certain features of some of these reports strike keynotes in experience, and will be of interest.

Mississippi.—Miss Susie V. Powell, State Department of Education, Jackson, reports: Campaigns of education by women's federated clubs and teachers against hookworm, typhoid, and tuberculosis, and for medical inspection and general health. Health leagues among teachers of whom special training in home and school sanitation is required.

Use of moving pictures owned and loaned by the Women's Federation of Clubs of Mississippi. Subjects: "The Summer Baby," several films on "Flies," "Health Day," "Clean-up Day," and "Beautify Day."

Much instructive literature distributed, samples of which are here for inspection.

Louisiana.—Mrs. Annabel J. Nathans, chairman, Council Jewish Women, New Orleans, reports: Wonderful amount of work done. School hygiene taught in fifth, sixth, seventh, eighth grades, high school, and normal school.

New Orleans has established a department of Clinical Psychology for the examination, classification, care, and teaching of backward children by trained teachers.

Medical inspection, and instruction of children, teachers, parents, and public in schools used as social centers by lectures on health and sanitation. Rapid progress in modern civic and school sanitation.

West Virginia.—Miss Lucy E. Prichard, chairman, Association of Collegiate Alumnae, Huntington, reports: Our greatest need is a modification of the law for the medical examination of school children which will compel the parents to carry out the suggestions made by the examiners.

Everywhere it is becoming apparent that the permissive physical examination laws are mistakes. The law to be effective and not be a loss in time and money must be mandatory both for the examination and on the parents or the community for subsequent necessary and prescribed care.

Minnesota.—Miss Isabel Lawrence, chairman, General Federation of Women's Clubs, St. Cloud, reports: Work on defectiveness—eyestrain, adenoids, poor teeth, etc.—has done more good than anything else attempted. Our methods have been constant agitation and concerted action of health clubs and health committees of federated clubs.

Utah.—Mrs. C. T. Van Winkle, chairman, Association of Collegiate Alumnae, Salt Lake City, reports: Work in Utah has been chiefly along the lines of Dr. Putnam's *School Janitors, Mothers, and Health.*

The Utah committee has issued an effective circular of advice:

1. Ascertain needs of public schools.
2. Bring needs before the public.
3. Co-operation, not scattering effort of state organizations.
4. Co-operation with school boards.

Maine.—Mrs. Franklin J. Rich, chairman, General Federation of Women's Clubs, Rockland, reports: Growing appreciation on part of public that school work cannot be satisfactorily done under adverse physical conditions.

Our women emphasize this in season and out of season.

The following is the text of the leaflet issued by the School Health Committee of the Department of School Patrons:

School Health

People are more important than things.

Education is more important than any mere pecuniary interest or industry.

The object of education is to develop physical health, encourage economic efficiency, and increase intellectual vigor. Ignorance and intelligence both tend to perpetuate themselves; that is why compulsory education is necessary.

In the school of the future, compulsory education will spell compulsory health instead of compulsory disease. (*Russell Sage Foundation, Bulletin No. 124.*)

Children are both born with and acquire certain remediable defects which uncorrected prevent their education or limit their capacity to receive it.

Defectiveness tends to perpetuate itself and thru heredity the numbers of defective children are multiplied.

Correction of defectiveness often insures to the child an education not otherwise possible.

Compulsory education has been achieved only by the passage and enforcement of laws having that object and effect.

Compulsory school health will be achieved only by the passage and enforcement of laws having that object and effect.

School health depends upon and comprehends the congenital and acquired physical and mental conditions of the child, its environment—home, school, and civic—and what and how the child is taught.

The child itself is more important than its environment, or what and how it is taught.

The physically normal child in a bad environment will be handicapped, but even then will be more susceptible to education than are defective children in good environment.

Defectiveness not only inhibits or limits education and leads to dependency, disease, and death, but, and usually unnecessarily, adds to the time, labor, and expense of parents, schools, and states.

The mere fact of parentage does not confer knowledge or appreciation of the child's physical or mental defectiveness, nor does proof thereof insure the co-operation of parents for its correction.

For these reasons compulsory school health is necessary.

Only eighteen states have laws for the physical examination of school children.

In ten of these states the laws are "permissive": Maine, Vermont, Connecticut, New York, Virginia, Ohio, Indiana, North Dakota, Washington, and California.

Only eight states have a mandatory physical examination law: Massachusetts, New Jersey, Pennsylvania, West Virginia, Louisiana, Minnesota, Utah, and Colorado.

In only one state, Colorado, is the care of the child's defectiveness, discovered by the examination, made mandatory upon the parent, or upon the community where the parents are financially unable to pay for the treatment required to correct such defectiveness. Colorado is also the only state in which the enforcement of all phases of the law is made mandatory upon a particular executive department of the state government—the State Bureau of Child and Animal Protection.

With a few changes the Colorado law could be adapted to any state and made a model law.

The chairman of the School Health Committee will furnish upon application a copy of the Colorado statute, together with the instructions, record blanks, etc., and other desirable information about its operation and effect.

Members of the school committees are advised to initiate and conduct campaigns for the passage of such laws in those states where none now exist, to make mandatory the "permissive" laws of those states having laws but not mandatory, and to encourage the better understanding and enforcement of all laws or "systems" where "systems" are in effect in lieu of laws, which make for the improved school health of children.

Aside from the moral fact that we are our brothers' keepers, the physical examination of school children and the correction of their defectiveness is a community right upon which it is our privilege to insist.

Efforts to improve environmental conditions will be most effective if one or two much-needed improvements be selected and worked upon until accomplished. These, too, are community rights upon which we may properly insist.

Educational propaganda will utilize to best advantage the audiences already provided by church, club, various meetings for other objects, and the press. This should precede, prepare for, and support direct appeal to the powers that be.

Time and effort should not be wasted on matters of minor importance when the really vital things are yet undone.

Concentrate your efforts. You can do what you will do.

Please give one program during the year to the discussion of "School Health."

CITIZEN CO-OPERATION WITH THE SCHOOLS

C. E. BEACH, SUPERINTENDENT OF CITY SCHOOLS, OLYMPIA, WASH.

One of the most healthful and hopeful indications of educational progress is the deep general interest of every American community in the public school in particular and in education in general. This is where the American youth learns the lesson of democracy, the lesson of self-reliance, the lesson of perseverance. He may acquire a smattering of history, mathematics, and science, but that is incidental, or rather, more often, accidental. The really essential things are that he shall feel himself a man among men, shall know that he can take care of himself, and shall have initiative and resource.

And this, for the most part, is not imparted in our colleges and universities, for they are not so purely democratic, so directly under the control of the people, and hence do not reflect so much of the real American spirit. By public school I mean particularly our elementary and secondary schools.

That the American public school has met the test of efficiency is clearly demonstrated by the report of the Mosley Commission. This commission was appointed to inquire into the reason why American engineers in South Africa were securing all of the best positions open and were so uniformly successful and efficient in carrying out the projects intrusted to their engineering skill. The report of this commission stated that the secret of this efficiency lay in the American public-school system.

Since, then, the public school is to reflect truly the spirit of American democracy, a close co-operation between the school and the community is highly desirable as it is inevitable that each should act and react upon the other. The school must help to hold before the youth those high American ideals of civic duty and responsibility, of industry and well-directed energy, of clean living and high thinking that have given virility and stability to our republic, and the public must see to it that the things that the boy learns in school are the things that he will use when he becomes a man. Lest anyone should infer that this statement favors the ultra-utilitarian in education, let me say parenthetically that I recognize the fact that the boys and girls must first rise to a high level of social and moral efficiency—that we must first make of the student a civic and social unit and then an industrial unit. But the fact remains that the course of study should be flexible enough to fit itself to the needs of the community and it is necessary for the community to see that the school responds to this need.

The two chief factors which contribute to the formation of character are work and play, and it is in these that the school needs the co-operation of the whole community. It is important, too, that we secure this co-operation in the right way and that it should not be dictation instead of co-operation. Nor should either the school or the community expect the other to assume duties and obligations that do not rightly belong to it. There has been lately a strong tendency to shift upon the school many burdens that rightly belong to the home or the church or the state or the commercial world. These the school should promptly and positively refuse to bear. On the other hand, the school should not ask the home to do its work. Too often pupils are assigned heavy tasks to be performed at home, the doing of which would effectually unfit the child for successful work in school on the following day, and failure to perform which would convict him of a violation of the teacher's command, which, if repeated, would eventually lead to contempt for any order of the teacher, or else to dishonesty in the evasion of it. And to those teachers who are accustomed to taking home a large armful of written exercises to be corrected and marked, I wish to suggest that it is far more important that they and their pupils go

to school in the morning thoroly rested and sweet and buoyant in spirit after a pleasant evening and a night of sound, refreshing sleep, than that every mistake and omission in those written exercises should be marked and returned to the pupils. In fact, I feel somewhat as did Cassius in regard to having "all my faults observed, set in a notebook, learned, and conned by rote, to cast into my teeth." I believe that the practice of calling attention continually to mistakes has a bad effect upon the pupil and the habit of looking continually for mistakes has a much worse effect upon the teacher. When the teacher leaves the schoolroom she should shut off the current of vital energy and see to it that the batteries are recharged for use the following day.

The child should have home work assigned to him, but it should be work pertaining to the home and not pertaining to the school. One of the most important factors in the formation of strong and good character is responsibility, and the child should early be given tasks to be performed regularly and he should assume the responsibility for the prompt and efficient performance of these. Instead of asking the student to solve ten problems in algebra we shall, at no distant date, suggest to him that he shall look after a pig or calf, that he curry a horse or milk a cow, that he build the kitchen fire and split enough wood to last thru the day, and I believe that these will develop as much sound character and perhaps more originality and initiative than will the solving of the given number of problems in algebra. At any rate, in some of the school work the boy may bluff his way thru the recitation, but if he should fail to minister to the needs of the calf, the calf will "bawl him out," or the pig will "squeal on him."

In one other way I wish to speak of the need of co-operation in the work of the school. The daily work of the school is meant to inculcate habits of regularity, punctuality, industry, and order. All of these are cardinal virtues in business life and they are also the virtues of the good citizen in the larger school of life. The discipline of the school instills habits of respect for, and obedience to, constituted authority and due consideration for the rights of others. Both the daily work of the school and the discipline of the school lead to the formation of habits of truthfulness, honesty, fidelity, and general trustworthiness.

The successful commercial or business organization is the one that is able to attract the class of patrons to which it wishes to cater. This is called effective advertising. It is well for the school to do effective advertising and some of the ways in which this may be done are thru the parent-teacher associations, the women's clubs, chambers of commerce or commercial clubs, invitations to the public to attend special programs such as those for Thanksgiving, Washington's birthday, Arbor Day, and Child Welfare Day, and a cordial and oft-repeated invitation to parents and patrons to visit the school during its regular sessions and inspect the everyday work of the students.

Should the school attempt to emphasize the importance of certain subjects such as spelling and writing, it would be well to enlist the interest of the community by means that educators know how to use effectively. In introducing a new feature in the curriculum, it is well to discuss the matter before the clubs and organizations before mentioned, seeing to it, of course, that the right persons present the salient points, so that when the step is finally taken there will be little danger of having to withdraw from a right position because it is in advance of public opinion.

I have suggested that the two chief ways in which the school needs the co-operation of the citizens of the community are in work and in play. The need for this co-operation in play is not usually taken so seriously, and yet it is frequently more vital than is the need for co-operation in work.

Play is the expression of a universal instinct and in order to develop the entire child it must be taken into account. Booker T. Washington says that he cannot recall that any part of his childhood was legitimately given to play, but he says that he believes he would be a more useful man today if he had devoted a portion of his early life to boyhood sports. Horace Mann says that he has but painful recollections of that period which, for every child, should be a golden age to look back upon. The lessons of the play field are just as important as are those of the schoolroom. The wise parent realizes this and makes timely and adequate provision for the play of his children. He interests himself in their recreations, and, so far as it is wise and possible, he participates. This should be the policy toward the play of the school. The fact that the community has provided adequate playgrounds and has equipped them is efficient, but it is not sufficient. It is necessary that the public should take a real interest in the sports of the school. The public sentiment should be: My school team! May they ever win! But, win or lose, my school team! Some of the desirable attributes of character to be developed thru play are: Self-direction, freedom of choice and action, skill, initiative, honesty, fairness, mental agility, accuracy, decision, co-operation or team-work, and these are the things that the business or professional man must have if he is to succeed; these are the things that made American engineers successful in South Africa and in other parts of the world; these, in short, are the elements of efficiency.

Permit me to repeat the statement that we need the co-operation of the citizens of the community in the play of the school no less than in the work of the school. If we should analyze carefully one hundred cases of "trouble" that have arisen in connection with our high schools in the past few years, I venture the assertion that at least fifty of them would be found to have been due directly or indirectly to athletics and to the abuse of athletics, not to their proper use—usually because the community has placed the emphasis upon the wrong thing, as it frequently does, by exhorting the boys to win and failing to attend the games when the home team is losing. As a result the boy assumes that the only unforgivable thing in athletics is to lose the

game. It is small wonder that he will resort to questionable tactics in order to live up to what is demanded of him. If the leading citizens will but take the trouble to attend the rallies and speak when asked to do so, always urging loyalty to school and team, clean sport, pluck, and perseverance as the ends to be attained, the boys will respond nobly. Along this line it is easier to secure those personal and valuable virtues, temperance and chastity. If the boy wishes to be strong he learns that he must be clean. Herein, too, lie the chief elements of strength of the Boy Scouts and the Knights of King Arthur. They must be pure as was Sir Galahad who said: "My strength is as the strength of ten because my heart is pure."

Sometimes the busy citizen is asked to do something for the school in connection either with its work or with its play, and, tho he will assure the solicitor of his interest and good will, he will decline because of a lack of time, but will salve his conscience by making a subscription to aid in the work or will hire someone to serve in his stead. But "he gives nothing but worthless gold who gives from a sense of duty." We are told that the finest polish upon the lenses of the great telescopes of the world is put on by the soft touch of the human hand. This is doubly true when we are dealing with boys and girls. The finest polish that the citizen can give the character of the youth of his community must be given thru the personal touch.

If you have helped to provide adequate and well-equipped school buildings, if you have helped to secure an adequate and well-prepared teaching force, if you have helped to provide adequate and well-equipped play fields and athletic grounds, so far you have done well, but "all this ought ye to have done and not have left the other undone." If you have not yet realized the importance of these things, it will be well for you to consider seriously the following lines by Dennis A. McCarthy:

Give them a chance for innocent sport,
  Give them a chance for fun:
Better a playground plot than a court
  And a jail when the harm is done!
Give them a chance. If you stint them now,
  Tomorrow you'll have to pay
A larger bill for a darker ill;
  So give them a chance to play!

Some of the practical and tangible results of citizen co-operation have been larger playgrounds, more and better equipment and play fields, improved sanitary conditions, shrubbery, walks, musical instruments, hot lunches in grammar and high schools, the introduction of industrial courses, music, drawing, medical inspection, etc., but always the spirit of co-operation and the desire to help will transcend the value of any material improvements. The real strength of Israel under Jeremiah lay in the fact that "the people had a mind to work."

Sometimes when it has been proposed that the club or the parent-teacher association aid in securing a certain improvement, someone suggests that,

as the members pay taxes, the school board order the improvement and pay for it from the school revenues. But the chief value of the improvement lies in the spirit of unity and harmony and personal interest which will result from having rendered some individual aid. In our psychology we learned that the mind consists of three important factors: intellect, sensibility, and will. The actions of these are called, respectively, knowing, feeling, and doing. The proper development and right direction of these constitute education. When the citizens of the community visit the school and then say: "I know better why the school needs a playfield; I feel that we ought to help to secure it for them; I move that we raise a thousand dollars to that end," we have here the whole process of education demonstrated and in this matter the school is an educational institution for the whole community.

All valuable co-operation must be based upon a thoro knowledge of facts, the public conscience must be awakened so that the community will feel right on educational subjects, and the determination to do must be crystallized by the leaders of action. This will touch the whole round of mental activities—the intelligence of the community, the feeling of the community, and the determination or will of the community.

If you will permit me to paraphrase a passage from Shakespeare, I wish to say that "all the world's a school, and all the men and women merely scholars," and we shall not have finished our course until we have learned that we live best when we live least for ourselves and most for others. That man is richest in soul who has given most to enrich other souls.

DEPARTMENT OF RURAL AND AGRICULTURAL EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—Ernest E. Balcomb, State Normal and Industrial College.....Greensboro, N.C.
Vice-President—F. W. Howe, Syracuse University.....Syracuse, N.Y.
Secretary—E. C. Bishop, Iowa State College.....Ames, Iowa

FIRST SESSION—Monday Forenoon, July 7, 1913

Joint Session with the Nature-Study Society and the School Garden Association of America

The joint meeting was called to order in the First Presbyterian Church, Salt Lake City, Utah, at 9:30 A.M. E. C. Bishop, Iowa State College, Ames, Iowa, presided at the meeting.

The first paper on the program was on the subject, "In What Way Can the Nature-Study Movement Be of Assistance to Agricultural Teaching and Social Center Work for Rural Communities?" which was presented by J. H. Paul, Department of Nature-Study, State Normal School, Salt Lake City, Utah.

E. C. Bishop, Iowa State College, Ames, Iowa, then read the "Report of the Committee on Courses of Study in Agriculture."

A paper on "How the Adoption of a Course of Study in Agriculture and Related Subjects Would Help the Public Schools" was presented by Josiah Main, professor of agriculture for schools, Oklahoma Agricultural and Mechanical College, Stillwater, Okla.

An adjourned meeting of the department was arranged for the transaction of business at 5:00 P.M.

SECOND SESSION—Monday Afternoon, July 7, 1913

The adjourned meeting of the department for the transaction of business met at 5:00 P.M.

The following officers were elected for the coming year:

For *President*—E. C. Bishop, Iowa State College, Ames, Iowa.
For *Vice-President*—O. J. Kern, College of Agriculture, Berkeley, Cal.
For *Secretary*—L. N. Duncan, Alabama Polytechnic Institute, Auburn, Ala.

It was moved and carried that the department request permission to hold a round table at the time of, and in connection with, the Department of Superintendence at its next meeting. The chairman was instructed to present the matter to the Secretary of the National Education Association.

It was moved and carried that a committee be appointed to investigate and report on conditions and needs in rural and agricultural education, such report to be made each year at the regular meeting of the department.

The following committee was appointed:

A. V. Storm, University of Minnesota, Minneapolis, Minn.
W. A. Lewis, principal, State Normal School, Hays, Kans.
J. D. Eggleston, president, Virginia Polytechnic Institute, Blacksburg, Va.

It was moved and carried that the Department of Rural and Agricultural Education hold itself in readiness to co-operate with the Panama-Pacific International Exposition in carrying out plans in the interests of rural and agricultural education. E. C. Bishop was authorized to communicate with James A. Barr, chief of the Education Department of the Exposition, and to carry out the wishes of the department.

THIRD SESSION—Wednesday Afternoon, July 9, 1913

The department met in joint session with the Library Department and was called to order at 2:30 P.M.

Topic: The Library and the Rural Community.

A paper on "Rural-School Libraries—Their Needs and Possibilities" was given by Ole S. Rice, state library clerk for Wisconsin, Madison, Wis. (For this paper see Library Department.)

A paper on "The Influence of the Agricultural College on the Farmer's Use of Books," written by William M. Hepburn, Purdue University, Lafayette, Ind., was read.

"Libraries for Rural Communities" was the subject of an address by P. P. Claxton, United States commissioner of education, Washington, D.C.

A discussion followed.

FOURTH SESSION—Thursday Forenoon, July 10, 1913

The Department of Rural and Agricultural Education met in joint session with the Department of Normal Schools. John A. H. Keith, president of the Department of Normal Schools being absent, Vice-President William E. Wilson took the chair.

D. W. Hayes, president, State Normal School, Peru, Nebr., presented a paper on the subject, "What the Normal Schools Can Do and Ought to Do with the Training of Teachers for Rural Communities." (For this paper see Department of Normal Schools.)

A discussion followed.

FIFTH SESSION—Friday Forenoon, July 11, 1913

The department met in joint session with the Departments of Elementary Education and Manual Training and Art Education, and was called to order at 9:30 A.M.

The following program was presented:

"Rural Schools and Community Needs"—Perry G. Holden, International Harvester Company, Chicago, Ill. (For this paper see Department of Manual Training and Art Education.)

"Agriculture and Gardening in the Public Schools"—Clayton F. Palmer, supervisor of agriculture, public schools, Los Angeles, Cal.

"Some Eliminations in the Content of Arithmetic as a Factor in the Economy of Time"—W. A. Jessup, director, School of Education, State University of Iowa, Iowa City, Iowa. (For this paper see Department of Elementary Education.)

The meeting then adjourned.

E. C. Bishop, *Secretary*

PAPERS AND DISCUSSIONS

IN WHAT WAY CAN THE NATURE-STUDY MOVEMENT BE OF ASSISTANCE TO AGRICULTURAL TEACHING AND SOCIAL CENTER WORK FOR RURAL COMMUNITIES?

J. H. PAUL, DEPARTMENT OF NATURE-STUDY, STATE NORMAL SCHOOL, SALT LAKE CITY, UTAH

Nature-study may be made the basis of agricultural work. Some advocate that it should consist entirely of agriculture. Whether this course is adopted or not, the teaching of nature will be made up, very largely, of the observation and doing of certain things which either prepare for, or give the meaning of, the fundamentals of modern agricultural practice. This will be especially true if what is taught as nature-study is a development course, rather than fragmentary or unrelated lessons. But even in the latter case, it is not easy to see how nature-study could be presented, without involving agriculture. Nature-study may be variously presented, and it is probably true that there is great variation in what is given under this title in different schools, even in the same section of the country. At the School of Education of the University of Utah, a course in nature-study is required of all regular normal students. The class is so large that it has been divided into three sections. Each student is placed in that section which most closely corresponds with the work of teaching which he or she expects to do, either kindergarten and primary, or the upper grades, or high-school and agricultural work.

Primary and kindergarten students take the course that deals primarily with the trees and the forest and with forest life.

Intermediate-grade teachers take the course that deals with the local weeds, the minerals, and the native bird life of the Rocky Mountains.

Those aiming to teach in higher grades study insect life in the fall, rocks and soils in the winter, and plant life in the spring.

Each course bears three hours of college credit, four hours if the laboratory work is taken. Starred books are used only for reference.

NATURE 1

Fall.—Forest Trees: Kinds, uses, and distribution of western timber and shade trees: *Sudworth, *Trees of the Pacific Slope;* Schwappach, *Forestry.* Laboratory: Planting and care: Blakeslee and Jarvis, *Trees in Winter,* Part I.

Winter.—Plant Resources of the Plateau: Soils, rainfall, and tree growth of the larger physical units: Paul, *Out Of Doors in the West,* chaps. xxxiv–xliv; and **Bulletins 71* and *68* of the Soils Bureau. Laboratory: Conservation of Resources: Gregory, *Checking the Waste.*

Spring.—Forest Life: The big game and other tenants; types of insects, mostly beneficial or beautiful: *Robertson-Miller, *Butterfly and Moth Book.* Laboratory: Bowman, *Forest Physiography,* chaps. i–ix, xiv–xx; or Moran, *Thru Wonderlands of the American West.*

NATURE 2

Fall.—Weed Pests: Plant devices for survival, illustrated by field study of forty local species: Paul, *Out of Doors in the West.* Laboratory: Native salt bushes and other useful plants.

Winter.—Mineral Resources· Properties, uses, and occurrence in the plateau of the common metallic, rock-forming, and gem minerals: Miller, *Minerals and How They Occur.* Laboratory: Selections from *Tarr, *Economic Geology of the United States.*

Spring.—Bird Life: Economic value and life-histories of the song and shore birds of the Rocky Mountains, with sight identification of 150 species: *Bailey, *Birds of the Western United States.* Laboratory: Harmful and beneficial mammals; birds of prey, and game birds: Fisher, Henshaw, McAtee, *Farmers' Bulletins.*

NATURE 3

Fall.—Insect Life: Sanderson and Jackson, *Elementary Entomology,* Parts 1 and 2. Laboratory: Insect Foes, chaps. iv, xi, xiv, and Part 3.

Winter.—Rocks and Soils: Geikie, *Class Book of Geology.* Laboratory: Rock disintegration and mineral waters: *Clarke, *Data of Geochemistry,* chaps. iii–vi, and xii. Laboratory: Bowles, *Determination of Common Rocks.*

Spring.—Plant Life: Notes on useful and harmful native species with culture of wild flowers: Garrett, *Spring Flora of the Wasatch.* Laboratory: Selections from McKane, *Injurious Insects.*

Method is provided for in a separate course. Each of the foregoing courses has three recitations and one laboratory period thruout the year. Books which present the same subjects in a manner suitable for grade teaching are now in course of publication for use of the schools of Utah. These books were adopted in manuscript form last winter.

The bearing of courses 2 and 3 on the teaching of agriculture is obvious. They give the fundamentals upon which scientific agriculture is based. They present the subject-matter, of course, from the standpoint of nature-study, with observation and experiment as the basis. In fact, to ask how such courses would be of assistance to agricultural teaching is like asking why the student of engineering should study mathematics or why the student of divinity should look into the Bible. This question suggests that in other parts of the country the courses in nature-study must vary widely from those which the Utah State Normal School gives to prospective teachers.

REPORT OF THE COMMITTEE ON COURSES OF STUDY IN AGRICULTURE

E. C. BISHOP, IOWA STATE COLLEGE, AMES, IOWA, CHAIRMAN

In order that the work of the committee might be facilitated, a territorial apportionment for investigational purposes has been made, as follows:

North Alleghany Division, F. W. Howe.
South Alleghany Division, E. E. Balcomb.
East Central Division, B. M. Davis.
West Central Division, Josiah Main.
Rocky Mountain Division, Riley O. Johnson.
General and Foreign Division, E. C. Bishop.

Work is now under way as follows:

A unified course of study.—One of the chief difficulties in providing the most helpful assistance in the teaching of agriculture, and directing the work in the public schools, is a lack of uniformity in requirements. This need is felt especially (*a*) in the character and extent of work offered; (*b*) in determining the entrance credit given the work by colleges, and in the certification of teachers; (*c*) in the lack of definiteness of direction, purpose, and extent in bulletins, circulars, text, and other helpful materials.

The adoption of a unified course of study in which the divisions of agriculture of general importance thruout the country are outlined as to essential topic development, and in which plenty of latitude for local adaptation is given, would result in a short time in the preparation of adapted materials, and in securing teachers trained with more definiteness and adaptability for teaching the subject.

Development of project work.—Agriculture should be taught as an applied science, or more particularly as the application of the most valuable phases of the other sciences to home and the community interests. To leave the teaching of agriculture without effective application thru extension into the home and community of the principles taught is fully as great a mistake as it would be to teach only the theory of reading, arithmetic, spelling, language, writing, drawing, and other subjects, which have their chief educational value in application by the pupil to his interests and activities.

Agriculture is not only a business and a profession, but it is also a mode of life. It is science, plus practice, plus living. Its values can be secured only thru well-planned, carefully directed project work.

Home and school gardening.—This is a division of work in agriculture which is potent with great good and inconceivable possibilities. It has in many places been given the kind of direction which has brought results of high educational value.

Farm management.—The principles in practice in farm management are calling for greater recognition in courses of study. There is a great deal of helpful direction in outlining and applying the principles of farm management.

Farm mechanics.—The relation of the principles of mechanics to farm practice is such that the study of farm mechanics should now have a well-defined place in the course of study. It should appear either as a topic under farm management or in the more extended course as a separate subject.

Agricultural booklet work.—The making of illustrated agricultural booklets as a result of school and home work in agriculture has promise of great good as a correlative factor in school work.

When properly planned, efficiently directed, and rightfully conserved, the agricultural booklet intensifies the interest of the pupil, gives direction to study and investigation, and leads him to definiteness of purpose,

clearness of vision, and care and skill in the selection and use of information, all of which are of a high order of value in the work of agriculture, and in the resulting correlative work in language, drawing, arithmetic, and other branches.

Community survey work.—Surveys for the purpose of securing information in making comparisons, and as a part of topic development work, are most valuable adjuncts to or parts of the course of study in agriculture. Crop surveys, farm animal, drainage and soil, farm projects, farm management, and other lines of surveys bringing out a knowledge of community facts may be conducted with most effective results in both grade and high-school work.

Boys' and girls' club work.—The work of the various boys' and girls' club organizations, either as an outgrowth of the work in agriculture and home economics given in the school, or as an initiatory movement in establishing these courses in the schools, is an important factor in agricultural education.

Preparation of teachers.—This is a vital question in the work of agriculture. The need of better preparation of teachers is imperative. The attempt of unprepared teachers to seek guidance, refuge, or obscurity, as the case may be, in a textbook in agriculture has done more to defeat the purpose of agricultural education thru the public schools than any other one thing.

The well-prepared teacher does not need a text, hence will not lean on a text, and can be trusted safely to use a text where the same is an advantage. The unprepared teacher who does not know the subject well enough to teach it without the text cannot be trusted with the text as a dependable prop. The question of preparation of teachers in agriculture is a pressing one, because of the great need of immediate supply, and of the steadily increasing demand, and from the lack of adequate facilities for such training.

Use of the textbook.—Your committee reaffirms its declaration concerning the use of textbooks with the following modifications:

1. The textbook in the hands of the pupil should be for reference only, and should be used only when necessary, as a means of supplying desired reading-matter which cannot otherwise be supplied to advantage.

2. If only a short simple course is offered, and where the teacher has not been well trained, a good textbook in the hands of pupils may sometimes be used to advantage with these cautions:

a) Books are merely aids; the study of agriculture is primarily a study of things, not about things.

b) Omit the portions of the text not pertinent to the study of the topics under consideration.

c) Do not confine the study of the student to reading the material in the text only.

d) Follow the outline prepared for the course in agriculture, and make no attempt to follow the order of topics in the textbook.

e) Have the pupils select from a general supply the reference materials needed after some such plan as indicated in the following topic:

Made-up-text and theme-book.—A plan which has been very successfully carried out, and which avoids the objectionable features in the use of a text in the hands of the pupil, is as follows:

1. Divide the work of the course of study up into natural subjects, such as farm crops, soils, farm animals, horticulture, farm management, dairying, poultry, rural economics, to suit the school term or semester divisions of time.

2. Under direction of the teacher, the pupil makes a selected collection of bulletins, circulars, monographs, and text references bearing on the particular subject to be taken up.

3. Using the outlines of the course of study as a guide, the pupil studies from his made-up-text and references, and then writes up the topics on loose-leaf paper which is collected under a board cover with shoestring or other fastenings into a theme-book. Appropriate illustrative drawings may be made a part of the theme-book.

4. At the close of the study of a particular subject, the pupil returns the reference materials to the school files, adds his reference list to the theme-book, makes an attractive cover for it, and retains the same as a permanent part of his work. The made-up-textbook cover is then filled with new subject references.

Credit for home work.—The rapid and favorable development of the plans for giving school credit for home work justifies the committee in recommending that increased attention be given this phase of the work. The work thus far developed seems in many cases to lack a definiteness of outline and application in grade points.

Personal hygiene.—Recognition should be given in the course of study to all work which has for its object the teaching of the principles of personal hygiene.

Home and community hygiene.—Recognition should be given to, and provision made for, the teaching of principles and the encouragement of the best practices in home and community hygiene. This will include a consideration of sewerage, drainage of stagnant pools and ponds, sources of drinking-water supply, and other matters relating to the health of home and community.

SUBCOMMITTEE REPORT ON METHODS IN AGRICULTURE

E. E. BALCOMB, STATE NORMAL AND INDUSTRIAL COLLEGE, GREENSBORO, N.C.

Our agricultural high schools should not attempt to be agricultural colleges either in their methods of teaching or in the work they undertake. The students they teach are younger, less mature, hence college methods will fail to reach them. They should not try to do any considerable amount of original experiments. Such experiments as are intended to mark real progress in agricultural science can be successfully

done only by the agricultural college with its trained experts and more ample equipment.

These high schools will find ample scope for experimental work in trying to adapt the findings of the colleges to the local conditions of the schools.

The most discouraging phase of this whole movement to teach agriculture in our schools is that the teaching tends to become simply academic routine.

The vast majority of teachers teach this subject in the old regulation way in which they were taught arithmetic, history, algebra, Latin, etc. The routine work from the textbook kills all interest any live boy has in agriculture. He longs to deal with things, not words. He wants to take off his coat, roll up his sleeves, and, as he puts it, "get at the real thing." He wants to work at a crop that he feels is his own and the net proceeds of which shall "jingle in his own jeans." Witness the boys' corn clubs, the girls' tomato clubs, which have succeeded beyond all expectation; they have frequently prospered and done great good, even where the supervision was very meager.

The teaching of agriculture in our high schools, and to a limited extent in our elementary schools, should in every way lead to a concrete working-out of the instruction given. Every teacher should supervise the work of each pupil on his home ground to the end that the pupil will make a better crop than he has ever made before and than he could have made had he not received the benefit of his teacher's supervision.

Our teachers who are not prepared to give this supervision and assume the responsibility of guaranteeing results are not prepared to teach agriculture, and should either prepare themselves or quit putting the teaching of this practical subject in the way of becoming a laughing-stock and byword among practical farmers.

HOW THE ADOPTION OF A COURSE OF STUDY IN AGRICULTURE AND RELATED SUBJECTS WOULD HELP THE PUBLIC SCHOOLS

JOSIAH MAIN, PROFESSOR OF AGRICULTURE FOR SCHOOLS, OKLAHOMA AGRICULTURAL AND MECHANICAL COLLEGE, STILLWATER, OKLA.

One who begins an investigation of high-school courses in agriculture is immediately struck with the diversity of opinion as to the proper time and sequence of presenting the different divisions of that comprehensive subject. And continued investigation, instead of bringing order out of the chaos, only results in compounding the confusion, until one must conclude that there is no unifying principle by the application of which the school man can determine in what year and in what order of sequence animal husbandry, or soils, or field crops, or a half-dozen others are best given. If there be such a

principle not more than one school of the half-hundred most prominent ones has discovered and applied it, for no two of them are alike.

It is inconceivable that the highest value for any subject is attainable by the teacher who does not know and appreciate the educational value of his subject. While educational values constitute a field of investigation as yet little developed, among the values whose existence is recognized must be included the disciplinary or cultural, the sentimental, the theoretical, the conventional, the utilitarian, and the preparatory.

It is hard to dissociate and classify any subject on the basis of a single value. Most subjects in the schools are defensible as contributing to several values. For the subject agriculture, the values claimed are the utilitarian, the preparatory, and the disciplinary.

When a human being is offered the choice of an immediate and apparent good or a remote good, less definite because of distance but not less certain or necessary, instinct prompts him to seize the immediate and ignore the remote. Thus it is with the earliest stages of the race, of infancy, or of any unfamiliar social situation or reform. But the time comes when advancing civilization, education, or evolution develops such appreciation of remote good that immediate material gratification is often restrained where it could be had only at the price of more remote good. Preparatory and disciplinary (cultural) educational values are apt to be remote; utilitarian as a rule are more immediate. It is therefore to be expected that, in the first stages of secondary agriculture, utilitarian values dominate courses of study. This is no rebuke to those making such courses since the contract imposed upon them was to "make good" from a practical standpoint.

The utilitarian purpose in agriculture being a concrete thing pertaining largely to the material environment, to relate the student to local utilities seemed to be the chief thing necessary in the making of a course of study in agriculture. So every school has done what was right in its own eyes at the expense of the disciplinary and preparatory values of the subject. Their easy success, and the influence of Old World models, where the sole purpose of such schools is avowedly utilitarian, only make more difficult a hearing for the plea that some kind of standardization or unifying principle is necessary before such schools can be truly disciplinary and preparatory as well as utilitarian. While admitting the fundamental value of such work, no college can admit its value as preparatory work any more than it can accredit the value to youth in terms of percentages and credits of early responsibilities, correct habits, good health, or racial virtue.

Furthermore, it is impossible to prepare teachers for agricultural high schools in the way that they are trained for other subjects until the normal school or college defines or recognizes a unit of equipment for a secondary agricultural school and maintains training courses which bring out the pedagogics and the material difficulties of each phase. We believe that there is a distinct field of secondary agriculture that has never yet been

defined and that there is a "best place" in its course for the presentation of each agricultural subject.

The contract of the purely utilitarian agricultural school or college is a very simple one in which success is measured by the value of an agricultural product; the undertaking of a teachers' training school is a more difficult one, as its ultimate products, educated men and women, are of slower attainment, and the factors many and difficult to control. Instead of a year, it may take a generation to measure its success. Educational agriculture is a very different thing from agricultural education. The latter, so far as it is investigation, is agricultural experimentation with plots, fertilizers, varieties, and herds. The former, so far as it is investigation, is educational experimentation, and we are coming to accept the assertion that there is not a subject in the entire curriculum but must be overhauled and tested before we may be sure of its educational value. Educational practices have heretofore been a matter of tradition; only today is the science of education at last getting possession of the tools with which it must exercise its investigational function. For such investigation, normal schools and teachers' colleges are supported, and training schools for pedagogical clinics and practice are necessary adjuncts to all such teachers' courses, whether kindergarten, elementary, or secondary. It may be that the best place for experimentation in agricultural education will be the agricultural college. Considering what normal schools sometimes do, I have no prejudice for or against the proposition. But one thing seems safe of assertion, that expert training in any field of agricultural investigation does not necessarily fit the investigator for leadership in educational investigation. Knowledge of the best ration of an adolescent steer is no warrant of skill in balancing the mental pabulum of the high-school ration. What to the agriculturist may seem an inferior grade of agricultural experiment may nevertheless be a superior grade of experiment in agricultural pedagogy. If the agricultural college is to be the training school for secondary teachers of agriculture, it should take on the whole pedagogical equipment for the training of such teachers, including a high school of agriculture to be used as a training school for prospective teachers. Such a training school would result in uniformity and standardization of courses.

One who reads the works of Darwin, Spencer, and Huxley cannot fail to catch some inspiration of the possibilities of science for the amelioration of our material hardships and the emancipation of human thought. What surprise, then, to note that, since the establishment of the sciences in the high schools twenty years ago, their curve has been steadily downward while each of the other recognized groups has been on the ascendency in percentage of high-school students pursuing them. This seems to be plainly due to failure in the method of presentation of the sciences, and the dominance of the least defensible of all educational values, the conventional. Shall this elimination of science continue while tradition and

occultism keep thought in bondage? We do not think so, but we are sure that the high-school sciences as means of emancipation are of very low efficiency compared with what they might be, and we are convinced that to correlate them with the agricultural subjects is mutually necessary to a proper high-school presentation of both. This calls for a definite standardization of the sciences.

When this is done, agriculture will become the salvation, and apparently the only salvation, of the biological sciences and chemistry to the high school. I hold that the disciplinary value of the scientific method is as great as the utilitarian value of agriculture in the high school, and that it is not the agricultural subjects as such, but the right kind of science teaching, which their inclusion alone can insure, that makes agriculture of the greatest value as a preparatory subject for any college. We should, therefore, use the economic appeal and stop trying to teach high-school sciences as if they had a conventional value. And since we do not want to correlate all of the agriculture out of agriculture, correlation must come chiefly by modification of science teaching.

Heretofore the high-school science student has ordinarily been a passive observer. With exercises in agricultural production, he becomes an active agent in control of the outcome, and thus his science gets into his muscles and thus contributes the necessary kinæsthetic factor in the learning process of the young. This correlation of science and agriculture, which can come only after standardization and uniformity, will also augment the science work by the use of the familiar science materials of the farm.

Difficulties peculiar to high-school agriculture make a discussion of the method of securing a national uniformity pertinent to this discussion tho not warranted by the topic assigned me.

Let an appropriate committee of the National Education Association, composed of agricultural and educational experts, signify a definite number of topics, such as dairying, corn, soil physics, forage crops, etc., comprehensive enough to cover the needs of every state, and prepared as monographs of stated length with contents apportioned into as many chapters as there are natural divisions of each. Let a competent authority in each state adopt for use in its high schools such of these monographs as its state agricultural college will prepare agreeable to the specifications, or select suitable foreign monographs so as to cover all of the topics appropriate to that state. To the committee would thus fall the function of indicating its approval of such monographs as were available or prepared for that purpose, and directory influence maintained by agreement with such colleges as students seek to secure recognition from for preparatory work done in agriculture. State supervision would naturally insure that standards of instruction were maintained, and the elasticity of the system would enable any state so to marshal its courses from prescribed and elective monographs as to insure a course appropriate to the locality or section, and to present it

in a seasonal order. The writer has used such a system of monographs and has proven to his own satisfaction, with such miscellaneous literature as he could find in several states, that this method gives latitude for informal practical work, permits a seasonal presentation, and obviates the tyranny of the textbook, in addition to the other merits claimed for it.

To summarize the value of the adoption of a uniform high-school course in agriculture:

1. It would make possible the training of teachers in secondary agricultural pedagogics.

2. It would enhance the utilitarian value of high-school agriculture by the elimination of freak courses and valueless exercises and the inclusion of essentials duly proportioned.

3. It would make possible the accrediting of schools and the evaluation of agriculture as a preparatory training, and permit the student of agriculture to carry to distant schools an intelligible report of work completed just as he now may in Latin or algebra.

4. It would save the sciences and the scientific method to the high school from which they are in danger of being lost.

AGRICULTURE AND GARDENING IN THE PUBLIC SCHOOLS

CLAYTON F. PALMER, SUPERVISOR OF AGRICULTURE, PUBLIC SCHOOLS, LOS ANGELES, CAL.

That industry which feeds, clothes, and shelters the human race must of necessity always occupy a prominent place in the minds of all thoughtful people. The soil must always be depended upon to furnish the raw materials from the use of which alone arises all that is visible in the material prosperity of the nation. Moreover, the less time and energy the race spends in providing itself with the fundamentals, the more it has left for developing the higher things of life. It therefore is apparent that a nation's first consideration is a well-developed agriculture; and history has amply demonstrated the fact that the status of agriculture is a reliable barometer of the rise and fall of the welfare of the race.

Public-school agriculture is not a fad, and it is time that those who know little or nothing about it cease attempting to teach it. Even the average science teacher is pretty much a failure as a teacher of agriculture, unless indeed he be capable of being born again. However, this subject has now safely passed the stage where it is necessary to demonstrate its adaptability and value in both elementary and secondary public-school work. The special need of today is to test our materials and methods, in order to learn which are best suited to the conditions under which our work must be done.

Real farmers are born and not made. The farmer boy may, or may not, be temperamentally fit for that occupation. Frequently, he has shown him-

self to be in possession of traits which have made a brilliant career in some profession a realization. On the other hand, many a city-bred youth has natural qualities, which, under proper encouragement, would enable him to make a great success as a farmer. I therefore contend that agriculture is as important a subject in the city school as in the country school. The differences lie more in the opportunities for carrying on the work, and the outside experience that the pupils bring to it, than in any innate differences between country and city youths.

Agriculture, as a public-school subject, has received more attention in high and rural schools than in city schools. There are but a few of the large cities of the United States which are conducting the work as a definite part of their educational system; among these are Philadelphia, Cleveland, and Los Angeles. One must speak from his own experience, and the writer asks the indulgence of his hearers to a brief discussion of such phases of the work carried on in the Los Angeles schools as appear to be of general interest. If we eliminate the matter of climate, our field is doubtless much like that to be found in many other cities of the country.

Agriculture, valuable as it may be, cannot be satisfactorily introduced into the public schools thru any edict of authority; it must begin thru the interest of a few teachers, and make a natural growth. Sacrifices will have to be made for it by those who really believe in it. Few teachers, principals, or superintendents realize how much of thought and hard work is necessary to make a real success of school gardening. Those who are succeeding know, and it is to be hoped that their services may be recognized in a way which will encourage other teachers to take up the work. Again, it is important that this work be placed in charge of those who know how to conduct it under school conditions.

Gardening has been in operation in a number of the Los Angeles schools, with varying degrees of success, for several years. It had demonstrated its value, and over a year ago a department of agriculture was formally established. This consists of a supervisor, assistant supervisor, and three special teachers—three men and two women in all. Each of the four assistants was assigned a definite section of the city to develop. A study was made of each school by itself, and the work recommended was based upon local conditions and opportunities. While assuring all principals of our willingness to co-operate with them, we have confined our efforts to helping with the work at such schools as seemed most desirous of conducting the gardening. The result was that we had calls to go to other schools faster than we were able to respond. Thus the growth has been logical and natural.

Headquarters were provided, where we meet teachers in conference and furnish all kinds of seeds and other supplies to a limited extent. Here we also receive and distribute plants, cuttings, etc., using a lath-house to harbor such materials meanwhile. But the location is in the heart of the city, and we hope soon to establish headquarters on an acre or two of ground, within a

five-cent car-ride. There we can have a laboratory, office, lath-houses, greenhouse, cold-frames, hotbeds, nursery, garden, etc. The piece of ground we have in mind is within easy walking-distance of six large schools, largely attended by little foreigners, and within a short car-ride of several other schools. Our plan is to keep at least one agricultural teacher at this headquarters all of the time, the classes coming there for instruction in various phases of the work. A practical gardener also would be an indispensable feature.

The above-mentioned plant would also serve as a practice center for our teachers. There is a great dearth of properly trained teachers of agriculture, and it looks as tho we should have to train our own teachers as we go for some time to come. While anxious to avoid making any remarks which might discourage some garden teachers, the writer feels that there is too much tendency to regard a short course as sufficient preparation for such work. Better remuneration for the teacher of gardening will greatly help in correcting this error. During the past year, we have conducted weekly classes in agriculture, under the auspices of the state university, which, thru our department, established its first "Extension Course in Agricultural Education." Conference classes also have helped us to advance the interests of the work.

Each assistant in our department goes from school to school, conferring with principals and teachers, and giving instruction to the regular teacher and her class at the same time. Later on, all go to the garden to put into practice such instructions as were given inside. We try to have the gardening assigned only to such teachers as show a willingness to conduct it, and an aptitude for it. In some schools during the past year, all teachers and all grades have done some gardening. Experience, however, indicates that it is wiser to specialize in this project in a few grades only, affording others such other opportunities for keeping up their interest as seem feasible. Grades four, five, and six seem best adapted to gardening.

The question of land is one of the most serious ones we have to solve, in many cases. We are making use of about forty vacant lots at the present time, and paying no rent for them. Usually they are situated near the school, many times adjoining the grounds. In one case, the classes go about a third of a mile to their garden. This garden is being voluntarily cared for this summer by one of the teachers and a squad of her pupils. When a suitable lot is found, the owner's consent to its use is obtained in writing, allowing us the removal of piping, fencing, in fact any improvements, when the owner again takes possession of the property. The board of education makes these improvements for us, and the city furnishes the water free.

During the past year, gardening has been done on a considerable scale at about sixty schools, and a number of others have been doing a little work along the edges and in the corners of the school grounds. Some of these

will have larger gardens on vacant lots this coming year; it is a good idea to let a school test itself in this matter on a small scale to begin with.

The fertilizer problem must always prove troublesome to city schools; we have changed many acres of very poor ground to fairly good soil by the use of street sweepings. This material, freed from papers and other foreign matter, makes a good fertilizer, and it is obtainable free from our street department in large quantities. We are not usually allowed to stack the sweeping to rot; it is spread and plowed or spaded into the soil, or used as a mulch. In such parts of the city as harbor animals, pupils often combine resources and manage to get a team and haul what fertilizer they need. If we are successful in securing headquarters a little way out from the center of the city, we shall plan to compost large quantities of sweepings, and thus provide ourselves with a sufficient supply of good fertilizer. We aim to have each school garden provided with a simple compost pit, in which pupils will be taught to reduce their waste plant materials to fertilizer. We, as a nation, need to learn the lesson of preventing the enormous waste which characterizes our operations in almost every industry. The public school is a good place in which to carry on this campaign.

The problem of proper tools in sufficient number must be solved the same as any other question of necessary supplies for school work. At the beginning, it may be advisable to ask pupils to bring tools from home; but as soon as it becomes apparent that the teacher is in earnest, suitable tools will be likely to be provided for the work. The trouble with some of us teachers is that we want a full equipment of tools or supplies along some line before we have demonstrated our ability and willingness to make the best use of what is at hand. That explains the presence of useless and unused materials at so many schools, and why some of the members of our boards of education are not more enthusiastic regarding the newer lines of school work.

It is a great mistake to provide children with cheap tools. Such do not command their respect, and as they show little judgment in their use the breakage is considerable. The strongest tools, of good material, are the most economical in the long run; and we should give more attention to the proper use and care of them. A suitable toolhouse should be provided in every instance, where they may be hung up in an orderly manner. We need to remember that the raising of plants, in itself, is not the most important thing in school gardening. It is quite possible to have good gardens, and at the same time permit practices which more than offset the good accomplished. Our duty is properly to train boys and girls; we should be able to do good gardening as well as make good gardens.

Ideally, there is little doubt that gardening should be optional with all pupils and teachers alike. As conditions are at present, we recommend that special consideration be shown one or more of the fourth, fifth, or sixth

grades. With fewer grades specializing in this work, it is usually possible to secure more time, larger plots, and as there are fewer teachers concerned, those supervising the work can more efficiently assist in it. It would seem wise, however, that every child's life be so ordered as to offer him a constant opportunity to interest himself in living things. Doubtless most children, if not all, would sooner or later develop such an interest, which if properly fostered would prove a source of pleasure and profit, enriching life in a way no other interest can. I therefore believe that some gardening should be a part of the activities of all of the lower grades, and suggest community plots in cases where individual plots are impracticable. Otherwise, these little people should take frequent trips about the gardens of others, with the teacher, thus keeping alive one of their most valuable instincts, and nurturing it for more active encouragement later on.

The fourth grade could add to the interest of the geography work by planting and caring for small plots of the cereals, fiber-plants, forage crops, field crops, etc. The fifth grade seems well adapted to the general gardening, the sixth grade to floriculture, the seventh to the propagation and care of fruits and ornamental forms, and the eighth to more scientific agriculture. These indicate the leading motives of the work we are trying to carry on in the different grades. The floriculture work consists in the raising of perennial flowers in boxes, transplanting into other flats, then into the open ground or into pots. In this and related phases of work, we are making use of lathhouses or cold-frames at most of the schools where much gardening is done.

As a rule, it is impossible for a teacher to do good gardening with a class of more than twenty pupils at a time. This is especially true with younger pupils and at the beginning of the work. As most grade classes are at least twice that size, some means of division of class is most desirable. This is effected in different ways in different cases. The girls may be attending a cookery class while the boys are in the garden, and the girls do their gardening while the boys take sloyd, etc.

A serious problem confronting all schools where much gardening is attempted is the care of plants over the long summer vacation. It is a mistake to leave the gardens to themselves, resulting in a great loss in educational value to the school. In one way or another, schools should and will find some way out of the difficulty. Our board of education has greatly encouraged us in this matter by employing janitors to care for their buildings and grounds, including the gardens, during vacation, on half-pay. Anticipating this, we planned our spring planting so as to include such vegetables as tomato, squash, pumpkin, corn, cucumbers, etc. As a result, many of our gardens were at their best at commencement, or later. Moreover, in many cases janitors will be able to profit considerably by harvesting such crops as mature early in the summer. In several cases, the gardens will be carried along as part of our summer courses, and we hope to make this contribute toward the success of these gardens another year. There is no

reason why we in California should not keep our gardens going the year around, if the project is organized with that end in view.

Home gardening, of one form or another, is a most logical outcome of the school gardening experiences. During the past year, Los Angeles has afforded gardening, to a greater or lesser degree, to more than 25,000 children in her grammar schools. Over 15,000 of these have interested themselves in home gardening; many have engaged in the work on rather a large scale, for such amateurs. We hope another year to be able to offer these little gardeners much more encouragement in their efforts to plant and care for home gardens. It is our belief that such extension work properly comes under the head of legitimate education, and what little has been done along this line, thus far, clearly indicates that it pays a big dividend. In some of our schools, we are employing "continuation" garden teachers; they receive $25 per month extra for after-school instruction in gardening. Part of this time is spent at the school garden, and part in visiting home gardens. The latter appears to possess the greater value, especially where the visits are paid to the homes of our little foreigners. The neighborhood about one of the schools largely attended by foreigners maintains nearly four hundred of these little home gardens, and their influence upon that section has proven of much benefit. It is no wonder that some of our teachers willingly carry on this work without thought of the financial remuneration which such deserves.

The schools of our city have been holding the exhibits of their work at their respective buildings this spring, and in about fifty schools these have included both flower and vegetable exhibits from the home gardens that have been planted and cared for by the pupils. Awards of plain ribbons were made, and both parents and children were greatly interested in these events. The school gardens were usually not disturbed, but were awarded ribbons as they stood. Such exhibits prove a very efficient means of arousing interest in gardening.

After carefully comparing the results obtained from various methods of operating gardens, under different conditions, we find ourselves tending toward the adoption, tentatively, of some such plan as follows: We advocate, first of all, that a border about three feet wide be left about the garden for perennial flowers. That width will accommodate a tall growing form for the rear and a lower growing one in front of it. Inside of the border, we lay out a walk, from two to three feet wide, and also a wide central path, unless the garden is narrow. We usually have our water hydrants along the central path, and it would seem that even in the eastern states, plenty of water should be at hand at all times. A few crosswalks are allowed for convenience, but we do not encourage the method in use in some gardens of splitting the space into many small plots. We aim to secure rows at least ten feet long, and do not believe that it is desirable to have each individual plot separated from its neighbors by paths. Where desirable, strings may

be stretched to indicate these plots; pupils working opposite each other may be asked to agree on the crops they plant, and thus make the rows continuous and of the same planting. If pupils wish to plant in fantastic designs, they should be encouraged to confine such to the home garden.

We reserve one plot for perennial garden herbs and vegetables and another for cuttings of grapes, figs, etc., also for raising seedlings to bud. Another portion of the garden is set aside for flowers, because we believe it is better to segregate them, in order that some sort of color scheme may be employed and that idea taught, than to mix them promiscuously among the vegetables. In many cases, desirable effects are secured by planting borders of flowers along the main walks.

Another idea that we have come to use largely in our gardens is to have our paths raised about two inches above the plots. Stakes are set at prominent points, and by stretching strings along the paths they may be trued at any time, and kept in good condition. This suggestion applies more, however, to warmer sections with light rainfall. Again, it would appear that it is a great waste of time and energy to plow up an entire garden and start all over again each time. Our plan is to lay out the garden carefully, and then leave it undisturbed, save for spading the plots thoroly.

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